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ABSTRACT

Presented is the final report (1974) of an assessment of vocational education programs for the handicapped under Part B of the 1968 Amendments to the Vocational Education Act which included the requirements that 10 percent of each state's basic vocational education grant be expended exclusively for the handicapped. Part 1 focuses on assessment at the state level and includes a statistical overview of vocational education programing for the handicapped in all 50 states, and the following information based on a survey of 25 sample states: a description of state administrations, a financial profile of the states, and a discussion of policy issues (such as minority and handicapped staffing). Part 2 consists of results of on-site assessments made at 92 projects for the handicapped in 24 states and includes a statistical overview of the sample, and information on policy and planning at the local level, project administration, and the instructional programs. Presented in Part 3 are results of approximately 1,000 case study interviews with participants and their parents and 94 interviews with employers. Findings and conclusions of the complete study are summarized and recommendations based on the study (such as the need for monitoring of state expenditures by the Office of Education) are outlined in Part 4. Appended are 33 tables of participant and parent data. (LS)

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AN ASSESSMENT OF VOCATIONAL EDUCATION PROGRAMS FOR THE HANDICAPPED UNDER PART B OF THE 1968 AMENDMENTS TO THE VOCATIONAL EDUCATION ACT

FINAL REPORT
October 30, 1974

EC 071 188

OLYMPUS RESEARCH CORPORATION
Salt Lake City, Utah
San Francisco, California

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CONTENTS

Title Page

ACKNOWLEDGMENTS - i

INTRODUCTION - 1

Purposes of the Study - 5

Study Approach - 8

Methodology - 9

Organization of the Report - - - - - - - - - - - - - - - - - - - 13

PART I
STATE LEVEL ASSESSMENT - - - - - - - - - - - - - - - - - - - 17

Statistical Overview - 19

Description of State Administrations - - - - - - - - - - - - - - 32

Financial Profile of the States - - - - - - - - - - - - - - - - 49

Issues and Policies - 55

PART II
PROJECT LEVEL ASSESSMENT - - - - - - - - - - - - - - - - - - 65

Statistical Overview - 69

Policy and Planning - 85

Project Administration - 101

The Instructional Program - - - - - - - - - - - - - - - - - - 112

Selection and Referral - 122

Educational Plans - 126

Title Page

Guidance and Counseling - 132
Equipment and Materials - 134
Program Costs and Outcomes - 134
Outcomes Information - 136

PART III
CASE STUDY INTERVIEWS - 141
Participants and Parent Characteristics - - - - - - - - - - - - - - - 146
Program Assessment: The View of Participants and Parents - - - - - - - 151
Job Experience - 167
The Employer Sample - 178

PART IV
EXECUTIVE SUMMARY - 193
Summary of Findings - 196
Conclusions of the Assessment - 227
Recommendations - 239

APPENDIX

A-1 Characteristics of Student Population - - - - - - - - - - - - - - 247
A-2 Characteristics of Respondent Household - - - - - - - - - - - - - 248
A-3 Type of Classroom Vocational Training Was Received In - - - - - - 249
A-4 How the Student First Heard of Vocational Education Program - - - 250
A-5 How Parents First Heard About the Vocational Education Program - - 251

Title Page

A-6 Most Important Reason for Student Enrollment Given by Parents/Guardians by Major Subgroups - - - - - - - - - - - - - - 252

A-7 The Ten Most Frequently Mentioned Vocational Education Classes Taken (Two Mentions) - - - - - - - - - - - - - - - - - - 253

A-8 What the Students Like Most About the Vocational Education Program - 254

A-9 What the Students Like Least About the Vocational Education Program (Collapsed Categories) - - - - - - - - - - - - - - - - 255

A-10 Students Evaluation of Vocational Program - - - - - - - - - - - - 256

A-11 Student Evaluation of Program Elements - - - - - - - - - - - - - 257

A-12 Student Appraisal of Possible Problems in Program Training - - - - 258

A-13 What Parents Liked Most About the Vocational Education Program (Collapsed Categories) - - - - - - - - - - - - - - - - 259

A-14 What Parents Liked Least About the Vocational Education Program (Collapsed Categories) - - - - - - - - - - - - - - - - 260

A-15 How Parents Rate the Vocational Education Program - - - - - - - - 261

A-16 Parent's Evaluation of Vocational Education Program - - - - - - - - 262

A-17 Parent's Evaluation of Program Elements - - - - - - - - - - - - - 263

A-18 Parent's Appraisal of Possible Problems in Program Training - - - - 264

A-19 How Parents Characterized Their Child's Personal Development as a Result of the Training Program - - - - - - - - - - - - - - 265

A-20 Students Who Had School Jobs in Both Related and Nonrelated Occupation Areas - 266

A-20a Type of Service Occupations Held on School Job - - - - - - - - - 267

A-21 How School Jobs Were Obtained - - - - - - - - - - - - - - - - 268

A-22 Where Job Training Was Received for School Jobs - - - - - - - - - 269

Title Page

A-23 Hours Worked and Hourly Wages Received at School Job - - - - - 270

A-24 Occupational Categories of Current Job - - - - - - - - - - - - - 271

A-24a Types of Service Occupations Held on Current Job - - - - - - - - 272

A-25 Type of Business/Industry of Current Job - - - - - - - - - - - - - 273

A-26 How Current Jobs Were Obtained - - - - - - - - - - - - - - - - - 274

A-27 Where Training was Received on Current Job - - - - - - - - - - - 275

A-28 Hours Worked and Hourly Wages Received at Current Job - - - - - 276

A-29 Number of Jobs Held Since Graduation From Vocational Education Program - 277

A-30 Most Frequently Mentioned Reasons for Leaving Jobs - - - - - - - - 278

A-31 Respondents Not Looking for Work the Past Three Months and Reasons for Not Looking for Work - - - - - - - - - - - - - 279

A-32 Future Plans and Job Expectations of Students as Viewed by Students and Parents - 280

A-33 Expected Earnings in One Year - - - - - - - - - - - - - - - - - - 281

LIST OF TABLES

Title		Page
Table I.1	Completer Information from Federal Statistics (FY 1973) on All Vocational Programs for the Handicapped -- Secondary and Post Secondary Programs	20
Table I.2	FY 1973 Expenditures for Handicapped Programs 25 Sample States	51
Table I.3	Percentage Breakdown by Federal and State/Local Contributions of Fiscal Year 1973 Expenditures for Handicapped Programs - 25 Sample States	53
Table I.4	Percentage Breakdown by Category of Fiscal Year 1973 Expenditures for Handicapped Programs - 25 Sample States	54
Table II.1	Projects and Enrollment by Type of Class -- Representative Sample of Vocational Education Projects for the Handicapped in Nineteen States (61 traditional projects)	78
Table II.2	Projects and Enrollments by Type of Project -- Representative Sample of Vocational Education Projects for the Handicapped in Nineteen States (61 traditional projects)	79
Table II.3	Number and Percent of Projects in Which Some Students Are Receiving Compensation -- Representative Sample of Vocational Education Projects in Nineteen States (61 traditional projects)	79
Table II.4	Number and Percent of Known Enrollment by Handicapping Condition -- Representative Sample of Vocational Education Projects in Nineteen States (61 traditional projects)	81
Table II.5	Number and Percent of Known Enrollment by Handicapping Condition -- Representative Sample of Vocational Education Projects for the Handicapped in Nineteen States (Thirteen unique projects)	82
Table II.6	Number and Percent of Enrollment by Sex and Racial and Ethnic Background -- Representative Sample of Vocational Education Projects for the Handicapped in Nineteen States (61 traditional projects)	83

Title Page

Table II.7 Number and Percent of Enrollment by Sex and Racial and Ethnic Background -- Representative Sample of Vocational Education Projects for the Handicapped in Nineteen States (13 unique projects) - - - - - - - - - 84

Table II.8 Allocation of Funds by Cost Category -- Representative Sample of Vocational Education Projects for the Handicapped in Nineteen States (61 traditional projects) - - - 103

Table II.9 Allocations of Funds by Cost Category -- Representative Sample of Vocational Education Projects for the Handicapped in Nineteen States (61 traditional projects; 1973-74) - 103

Table II.10 Breakdown of 92 Vocational Education Projects for the Handicapped in 24 States by Type of Institution (1973-74) - 106

Table II.11 Enrollment by Type of Training (71 Projects) - - - - - - - - 130

Table II.12 Range of Student Hours -- Representative Sample of Vocational Education Projects for the Handicapped in Nineteen States (61 traditional projects) - - - - - - - - 133

Table II.13 Outcomes Information for Twenty out of 64 Traditional Vocational Education Programs for the Handicapped Included in a Representative Sample of 74 Projects in Nineteen States (1972-73) - - - - - - - - - - - - - - - 137

Table III.1 Vocational Education for the Handicapped Study Program Sample Recovery - 144

Table III.2 Summary Measures of Participant Characteristics - - - - - 148

Table III.3 Summary of Reasons Given for Enrollment by Parents or Guardians in a Vocational Education Program - - - - 154

Table III.4 Ten Most Frequent Program Content Areas - - - - - - - - - 155

Table III.5 Summary of Program Likes and Dislikes - - - - - - - - - - 157

Table III.6 Summary of Attitudes toward Various Program Components - 160

Title Page

Table III.7 Summary of Participant Response to Possible Problem Areas - 161

Table III.8 Summary of Program Likes and Dislikes: The Parents' View - 163

Table III.9 Summary of Parents' Ratings of Child's Progress in Four Interpersonal Skill Areas during or after Program Participation - 166

Table III.10 Current Job Holders - - - - - - - - - - - - - - - - - - - 168

Table III.11 Summary of Job Description and Type of Business or Industry - 170

Table III.12 Current Employment Experience of Program Completers Out of School - 171

Table III.13 Number of Jobs Held Since Graduation from Vocational Education Program by Program Completers not in School - 172

Table III.14 Significant Relationships by Sex - - - - - - - - - - - - - 176

Table III.15 General Attitude of Handicapped Student Workers as Perceived by Employers - - - - - - - - - - - - - - - - - 179

Table III.16 Comparison of Handicapped Student Workers with Regular Workers - 180

Table III.17 Problem Areas Encountered with Handicapped Employers in the Last Two Years - - - - - - - - - - - - - - - - - 181

Table III.18 Student Referral Process and Initial Employer Involvement - 183

Table III.19 Procedures Followed for Hiring Handicapped Students as Regular Employees - - - - - - - - - - - - - - - - - - 184

Table III.20 Employer Reasons for not Participating in Program - - - - 186

Table III.21 Nonparticipating Employer's Views of Possible Program Participation - 187

Table III.22 Need for Tailoring Jobs for Handicapped Employers - - - 189

Table III.23 Characteristics of Employer Sample - - - - - - - - - - - 190

LIST OF FIGURES

Title		Page
Figure 1.1	Percent of Federal Funds (Part B) Expended for Handicapped (FY 1973)	23
Figure 1.2	Cost Per Handicapped Student (All Programs - FY 1973)	25
Figure 1.3	Comparison of Percentage of Total Vocational Education Funds Expended for Handicapped with the Percent of Total Vocational Education Enrollment that is Handicapped (FY 1973)	27
Figure 1.4	Comparison of Total Vocational Education Funds Expended for Handicapped (all Programs) with Vocational Education Funds for Handicapped under Part B (FY 1973)	29

INTRODUCTION

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INTRODUCTION

Society's approach to its handicapped -- to individuals who because of physical, mental, or emotional disabilities do not meet the community definition of "normal" -- has almost always been awkward. The reaction of the non-handicapped to the handicapped is often one of discomfort and, sometimes, revulsion. Both employers and their employees often shun the handicapped because of the way they "look" or because they assume that the handicapped are not as competent -- at any job -- as non-handicapped people. Partially as a result of these all too common attitudes, the handicapped have been segregated, or have segregated themselves, and efforts to bring them into the mainstream of society have been, until recent years, both extremely rare and without widespread success.

Many of the difficulties faced by the handicapped are less the result of their handicapping conditions than they are of society's perception of such conditions. The very designation "handicapped" not only sets individuals apart from the rest of the population but also carries with it a strong negative connotation of incompleteness and incompetence. Even attempts to further classify the handicapped into such categories as "educable mentally retarded," "speech impaired," "hard of hearing," and "blind" are often arbitrary in their failure to account for individual differences, and are sometimes inaccurate or misleading.

These problems are compounded in the educational and employment arenas. Traditionally, there has been little emphasis in vocational education on programming for the handicapped. Handicapped students who could not compete on an equal basis with the non-handicapped have had to look outside the regular vocational education establishment for the rare opportunities available to them in sheltered workshops, private training programs, or institutions for the handicapped. Even rarer have been training opportunities that prepared the handicapped to compete in the open labor market with the non-handicapped. There has been little access to the normal world of work; that door was closed.

In the early 1960s, spokesmen for the handicapped began to impress upon the public mind this waste of human potential, and in 1963 Congress passed the Vocational Education Act which charged the states specifically with the responsibility of providing vocational programming for the handicapped. After four years had passed, however, this general legislative charge had produced few new opportunities for handicapped individuals. Thus, in the Vocational Education Amendments of 1968, Congress required that 10 percent of each state's basic grant for vocational education (Part B of the amendments) be used exclusively to finance programs "for handicapped persons who because of their handicapping condition cannot succeed in the regular vocational education program without special educational assistance or who require a modified educational program." The amendments defined the term "handicapped" as follows:

> ...persons who are mentally retarded, hard of hearing, speech impaired, visually handicapped, seriously emotionally disturbed, crippled or other health impaired persons who by reason thereof require special educational and related services.

Aside from the specific fiscal set-aside, the amendments detail organizational, planning, operating and reporting requirements that apply to Part B funds in general but are, nonetheless, specifically relevant to programming for the handicapped. One of these requirements is the establishment of a state advisory council, which must include a member knowledgeable in the special education needs of the handicapped, and which must evaluate the programs funded under the amendments.

Another section of the amendments which applies to handicapped programming, as well as all other programming under Part B, is the requirement for a "state plan." This plan must include, among other specifics, the long range and more immediate vocational education needs in the state, a plan to meet these specific needs, an annual plan detailing the allocation of funds for the coming fiscal year, and a rationale for the particular plan of allocation.

In addition, the state plan must describe specific administrative policies and procedures which would:

(1) Insure that local economic and demographic characteristics are considered in the allocation of funds;

(2) Require local education agency (LEA) applications for funds to contain plans to meet the specific vocational education needs of both the students and the community served by the agency;

(3) Create cooperative arrangements with public employment offices in the state; and

(4) Set forth fiscal and accounting procedures which will assure "proper" accounting of federal funds paid to the states under the amendments.

To summarize, the amendments require that 10 percent of each state's Part B allotment be expended exclusively for the handicapped. They further require that such programming be based on detailed needs assessments, planning, administrative organization, cooperative agreements, accounting, and evaluation.

These requirements, however, are stated in general terms. In order to clarify, specify, and encourage the implementation of those sections of the amendments relating to programming for the handicapped, the National Center for Educational Statistics of the Office of Education produced a document in 1973 entitled _Guidelines for Identifying, Classifying, and Serving the Disadvantaged and Handicapped Under the Vocational Education Amendments of 1968._

With regard to the handicapped, these guidelines cover the following topics:

1. _Eligibility:_ An individual must be classified in one of the nine general categories of handicap identified in the amendments. Further, handicapped individuals must be demonstrably unable to succeed in a regular class because of their handicaps. Each individual served by a program must be separately and specifically qualified for the program.
2. _Possible Services:_ In addition to the full cost of school or class programs that are exclusively for the handicapped, the guidelines list twelve types of services for which the Part B set-aside can be used. These services range from surveys and identification of the handicapped, through staff and curriculum development, to development of relationships with the business community.
3. _Cooperative Agreements:_ The _Federal Register_ specifically requires cooperative arrangements with the public employment service, with state agencies responsible for the education of the handicapped, with other appropriate agencies, organizations, and institutions, and with other states. The guidelines list more than

thirty agencies and categories of organizations that would be appropriate subjects for cooperative agreements with Divisions of Vocational Education in serving the handicapped.

4. Classification: Examples are given for each of the nine general categories of handicapped noted in the amendments. Three categories are broken down into sub-categories. In several cases, definitions are suggested, but such definitions are ultimately the responsibility of states.

5. Sample Tables: Three tables are offered as examples of the kinds of data needed to monitor vocational education programs for the handicapped.

Purposes of the Study

The amendments have now been in operation for four years in most states (although some states and/or local areas began programming for the handicapped prior to the 1968 amendments), but as of June 1973 (when this study was initiated) little was known of the strategies adopted by states for allocating funds under the amendments, state planning for the 10 percent set-aside, methods of selecting local programs for support, and the extent of support provided by sources other than vocational education. For example, the information provided by the states to the Office of Education was incomplete and unreliable. The only data aggregated to the state level were enrollments and expenditures. Locations of individual programs were unknown, as was enrollment by type of handicapping condition. In addition, the diagnostic procedures used by states and local schools in identifying and classifying handicapped individuals was unknown, although it was expected that a good deal of inconsistency existed in this area. Post-program information (completions and placements) was also generally unavailable, as were the types of projects funded; i.e., whether the classes were "regular" (handicapped and non-handicapped mixed in the same class) or "special" (classes exclusively for the handicapped), the occupational offerings, and the instructional techniques used.

The overall purpose of the study was to at least partially rectify this situation. It called for an assessment of vocational education for the handicapped under Part B of the amendments for secondary level students (post-secondary level projects were excluded). Its specific objectives, as outlined in the Request for Proposal (RFP) issued by the Office of Education, were as follows:

(1) To provide programmatically useful information on the relationships between post program performance and the kinds of experiences that handicapped students receive in various vocational education programs (This would involve identifying, analyzing and comparing administrative and organizational designs of vocational education programs serving handicapped students, examining the purposes and sub-purposes of these programs to assess similarities and unique differences, and identifying and describing educational experiences and supportive services present in vocational education programs for handicapped students.)

(2) To identify and analyze existing constraints or limitations in carrying out the various vocational education programs for handicapped students, including constraints internal to the program and those constraints external to the program;

(3) To determine the feasibility of expanding a work experience component in vocational programs for the handicapped and the conditions under which expansion is possible (This would involve interviews with participating employers in sites where projects have a work experience component as well as interviews with non-participating employers and program personnel.)

(4) To examine the strategies used by states in identifying handicapped students and their need for services and the selection of projects for funding;

(5) To determine to the extent possible the degree to which funds from the 10 percent set-aside under Part B for handicapped students actually reach handicapped students rather than become indistinguishable from other vocational education funds.

The study was also to explore such issues as the potential effect of revenue sharing legislation on programming for the handicapped, the extent to which the handicapped are placed in classes with non-handicapped students (regular classes) as opposed to being placed in classes exclusively for the handicapped (special classes), and state and local administrator views on the policy of providing set-aside funds for handicapped students.

Study Approach

Olympus Research Corporation designed a three part approach for carrying out the objectives of the study: (1) an assessment of program administration at the state level; (2) a project level assessment of vocational education for the handicapped; and (3) case study interviews with students, parents (or heads of households), and employers.

State Level Administration

The "State Level Assessment" had two purposes: (1) to describe the administration of vocational education for the handicapped at the state level; and (2) to identify all projects funded by the states. The administrative descriptions would include how states organize to administer the program, state planning, methods of disbursing funds, and program monitoring and evaluation.

The lists of projects compiled for each state would be used in selecting a representative sample of vocational education projects for the handicapped to be visited by ORC research teams.

Project Level Assessment

The purposes of the project level assessment were to determine the following:

(1) The training provided by specific trade or skill;

(2) The types of programs funded (e.g. special, regular or combination; cooperative education, work study, etc.);

(3) The types of institutions in which the training takes place (e.g., vocational schools, comprehensive high schools, institutions exclusively for the handicapped, etc.);

(4) The training provided by type of handicapping condition;

(5) Project outcomes (completions, placements, etc.);

(6) Local level policy, planning, and administration of vocational education for the handicapped;

(7) Types of instruction provided; and

(8) Types of staff used to carry out vocational education projects for the handicapped.

Case Study Interviews

The purposes of the case study interviews were:

(1) To obtain assessments of vocational education programs for the handicapped from students and former students, from their parents or heads of households, and from various groups of employers (both participating and non-participating);

(2) To obtain socioeconomic and other information on students enrolled or formerly enrolled in vocational education programs for the handicapped;

(3) To obtain follow-up information (jobs held, wages, periods of employment, promotions, etc.) from handicapped completers of vocational education programs; and

(4) To assess the feasibility of expanding work experience components of vocational training for handicapped students.

An analysis of information from these three separate but interrelated parts of the overall study was used to fulfill the objectives of the study.

Methodology

The RFP called for the collection of data in 25 states and site visits to 100 projects within the 25 sample states. It also called for an unspecified number of interviews with students and employers. ORC's methodologies for selecting the state, project, and interview samples are described below.

The State Sample

The selection of the state sample was based on fiscal year 1972 information on state enrollments and types of programs funded for the handicapped (Part B regular vocational education, Part G cooperative education, and Part H work study), as reported to the Office of Education by the 50 states. Both small and large state programs -- and different mixes of program types -- were considered in the selection process. A proportionately stratified probability sample of states was selected. Since individual states were selected with probabilities proportionate to size, the selected states, distributed by number of participants, parallels the national size of the program. The 25 states selected were as follows:

- Massachusetts
- New York
- New Jersey
- Pennsylvania
- Maryland
- Florida
- Alabama
- Georgia
- North Carolina
- Kentucky
- Tennessee
- Michigan
- Minnesota
- Ohio
- Illinois
- Wisconsin
- Texas
- Oklahoma
- Missouri
- Kansas
- Wyoming
- California
- Arizona
- Idaho
- Washington

The Project Sample

The project sample was not selected until after the ORC research teams had completed the state level assessment and had compiled lists of projects in each of the states. The original objective was to select a sample of 100 projects representative of all projects in the 25 states. However, because of the lack of project information available in two states and low enrollments in four states, this proved to be impossible. In California and Georgia, Part B set-aside funds were allocated to local education agencies; they were not used to fund projects. Thus, in order to obtain project information, it would have been necessary to visit local education agencies in both states. This would not only have delayed the project but the cost of visiting all local education agencies in California and Georgia would have been prohibitive.

In four states (Washington, Idaho, Wyoming, and Kansas) enrollments were so low that, in a random selection procedure, the chances were that no projects would have been selected from those states.

The project sample, therefore, was divided into two sub-samples:

1. Representative Sample: A total of 74 projects, selected randomly, in nineteen states which were representative of all projects existing in the nineteen states, but not necessarily representative of projects existing in individual states.
2. Special Sample: A purposive sample of eighteen projects operating in California, Washington, Idaho, Wyoming, and Kansas. One project each was selected from the four "low enrollment" states, and fourteen projects from California. In California projects were identified by selecting, randomly, a sample of local education agencies which receive Part B set-aside funds, visiting the local education agencies selected, and selecting the projects. It was decided to eliminate Georgia from the project level assessment because the costs of field visits to local education agencies in Georgia by the California-based ORC staff would have been too high.

The number of projects selected per state in the nineteen "representative" states was based on each state's proportional contribution to total enrollment in the nineteen states. With regard to the "special sample," a relatively large number of projects was selected for California because California's handicapped enrollment is the largest of any of the 25 sample states.

The Case Study Interviews

The case studies of participants, their parents (or heads of households), and employers were selected from projects in the following five states: North Carolina, New Jersey, Illinois, Texas, and Ohio -- all states included in the "representative" sample. The criteria for selecting these states were:

(1) Completeness of state data on projects and participants;

(2) Size of programs (total state enrollments);

(3) Representativeness of program types (special, regular, work study, non-work study, etc.);

(4) Geographic location; and

(5) Availability of employers participating in work study and/or cooperative education projects.

A total of 667 projects were in operation in the five case study states, or about 45 percent of all projects in the 25 sample states (counting local education agencies as "projects" in California and Georgia), and the estimated enrollment in the five states was 37,326, or about 41 percent of the total enrollment in the 25 states.

ORC sought to interview 200 students and parents in each of the case study states. The samples of students to be interviewed were chosen randomly from records made available by local school administrators. The names of participating employers were also obtained through school records.

In order to select a sample of non-participating employers, the participating employers were categorized by size and type of industry. By matching other businesses within the locales where the participating employers were located, by size and type of industry, a sample of non-participating employers was selected.

A total of 1001 student and parent interviews were conducted, 681 with students currently enrolled and 320 with students who had completed the projects during the 1972-73 school year. The number of employer interviews totaled 165. Of these, 94 were participating in the projects and 74 were not participating. All interviews were conducted by Decision Making Information (DMI) under subcontract to ORC.

Organization of the Report

The report is a detailed description of ORC's findings and conclusions. Part I focuses on state level administration of vocational education programs for the handicapped under Part B of the Vocational Education Amendments of 1968. Part II looks at the program from the local or "project level," and Part III discusses the results of the student, parent and employer interviews. In Part IV the findings and conclusions of the study are summarized and recommendations based on the study results are outlined. Part IV is also available as a separate document.

It should be emphasized that ORC conducted an assessment, not an evaluation, of the Part B program for the handicapped. The program was not measured against a given set of criteria of what constitutes a "good" program. Rather, the attempt was made to determine how states, local education agencies, and schools are coping with the Part B set-aside, both from administrative and program points of view. Although some of the findings may appear to be negative, it should be kept in mind that the most important finding of the study is that the Part B set-aside has resulted in vocational education projects for the handicapped that would never have occurred had there been no set-aside enacted into law, and that most of the set-aside funds are being used to provide direct services for the handicapped. Many of the program weaknesses identified in Parts I and II of the report are administrative in nature, and may be partly due to inexperience on the part of vocational education administrators who have never before been given the responsibility of providing educational services for handicapped individuals. They may also be due to administrative weaknesses in the entire educational system, from national to local levels. One conclusion is inescapable: If vocational educators were to correct some of the major administrative weaknesses identified in this report -- weaknesses which may not be their sole responsibility -- funds now being spent to provide direct services for the handicapped would be siphoned off for administrative purposes.

This "trade off" should be kept in mind in reading the remainder of this report.

15/16

PART I

STATE LEVEL ASSESSMENT

STATE LEVEL ASSESSMENT

One of the major objectives of the study was to "examine the strategies used by the states in identifying handicapped students and their need for services and the selection of projects for funding." To fulfill this objective, administrators in all 25 of the sample states were interviewed. The assessment which follows is based on interviews with state directors of vocational education, program officers in charge of the Part B set-aside, state directors of special education, planning, research, and statistics personnel; and on data collected at the state level. The following are some of the issues that underlie an assessment of the administration of the Part B set-aside:

1. What procedures are used by the different states to identify their handicapped populations?
2. How does each state determine the vocational education needs of their handicapped populations?
3. How does each state allocate the resources it has available for the handicapped?
4. How does each state select the projects it funds?
5. What coordination exists with other state and non-state agencies?
6. How, and to what extent, are effective practices identifed and disseminated?

The answers to these questions varied widely from state to state, both with respect to the organizational and administrative techniques employed and to the amount of thought that had been given to the "issues." It was apparent that most states were still struggling with what (to vocational education administrators, at least) was a comparatively "new" and complicated program. All were aware of the rash of class action suits that had been brought against state departments of education and local education agencies on behalf of the handicapped, and all seemed to agree that it was the responsibility of the public school system to provide educational services for all students -- handicapped and non-handicapped. However, techniques for planning, organizing and administering a program for the more severely handicapped were still in the experimental stage in most states.

The following topics will be covered in the state level assessment:

(1) Analysis of National Data: A statistical overview of vocational education programming for the handicapped in all 50 states

(2) Description of State Administrations: An organization profile delineating in general terms the organizational patterns encountered, an operating profile covering the actual activities of the state administrations, a description of management information systems detailing the planning, project selection, monitoring and evaluation cycle, and the gaps that exist in it

(3) Financial Profile of the States: A description of the actual allocations and expenditures of funds in the states, and a comparison of allocation patterns between states and from year to year within each state

(4) Policy Issues: A discussion of a variety of issues that either were identified prior to the state visits or arose during the visits, including relationships with special education, "universal education" suits and legislation, minority and handicapped staffing, and the effect of regional activities on state performance

Statistical Overview

Each year there is a wide range of data on Part B handicapped programs reported by the states to the Office of Education. For example, the states must report in considerable detail on program costs, enrollments, and completions. Because of these requirements, it was anticipated that cost, enrollment, and completions data, on a project-by-project basis, would be available to research teams in the field. However, such information -- particularly enrollment and completion data -- was often not forthcoming.

Data on completers of vocational education programs for the handicapped were particularly inadequate at the state level. Therefore, it was decided to examine completer information reported by the states to the Office of Education to determine whether the national figures would be more complete than those collected by research teams at the state level.

Table I-1 present information on completers of all handicapped programs, funded under the Vocational Education Act, both secondary and post secondary, for fiscal year 1973 as reported to the Office of Education by the states. The number of completers reported ranged from 4,392 in Florida to none at all in California, New York, and Ohio. Michigan reported eight completers, Oklahoma 2,240. In Minnesota 73 percent of the program enrollees completed; the corresponding figure for Texas was only 4 percent.

Clearly, the states were not in agreement on how to satisfy this particular federal reporting requirement. Some had no figures at all to report. Others, apparently, reported scattered completer figures from some, but not all, of the projects within their states.

There were several reasons for the erratic nature of this information. Perhaps the most important was that many states did not require local education agencies or schools

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Table I.1

Completer Information from Federal Statistics (FY 1973) on All Vocational Programs for the Handicapped -- Secondary and Post Secondary

State	Handicapped Enrollment	No. of Handicapped Completers	Percent Completing	Total No. of Completers Status Unknown or Unemployed	Percent Completing Status Unknown or Unemployed
Alabama	1,838	567	31%	115	20%
Arizona	1,466	246	17%	22	9%
California	17,745	0	0%	0	0%
Florida	11,245	4,892	44%	680	14%
Georgia	12,076	1,136	9%	227	20%
Idaho	303	48	16%	3	6%
Illinois	14,597	2,432	17%	743	31%
Kansas	3,061	587	25%	74	13%
Kentucky	3,061	777	25%	158	20%
Maryland	5,058	576	11%	37	6%
Massachusetts	1,642	140	9%	21	15%
Michigan	3,622	8	.2%	3	38%
Minnesota	2,205	1,600	73%	217	14%
Missouri	3,959	1,332	34%	185	14%
New Jersey	5,260	427	8%	64	15%
New York	9,246	0	0%	0	0%
North Carolina	4,957	860	17%	230	27%
Ohio	16,221	0	0%	0	0%
Oklahoma	10,341	2,240	22%	223	10%
Pennsylvania	13,434	897	7%	204	23%
Tennessee	5,160	1,753	34%	837	48%
Texas	11,920	531	4%	133	25%
Washington	6,196	976	16%	337	35%
Wisconsin	4,777	616	13%	120	19%
Wyoming	302	217	72%	33	15%

to report on completers. The second was that even in those states which required schools to provide completer information, there was no common definition of the term "completer." In some states, for example, students were not considered completers until they entered the labor force or did not re-enroll in school (either in the "project" or in other classes). In other states, the sole criterion for completer was that the student remain in the project for one year. Regardless of the reasons, the national data on handicapped completers was not useful for program monitoring purposes, or for making comparisons between states.

Data on enrollment and expenditures were examined to create a general picture of the programming that has developed under the amendments and to determine whether national statistics support some of this study's conclusions.

Figure I.1 shows the percentage of each state's Part B grant that was expended for the handicapped in fiscal year 1973. In 35 states, expenditures for the handicapped exceeded 10 percent of total expenditures. This does not necessarily mean that the fifteen states whose expenditures for the handicapped were less than 10 percent of total Part B expenditures were not in conformity with the law. The law states that 10 percent of Part B appropriations must be expended for the handicapped. Expenditures data includes both appropriations and carry over funds from the previous fiscal year. It is an indication, however, that some states may not be allocating the required 10 percent for vocational programming for the handicapped.

Figure I.2 shows the average cost per handicapped student in fiscal year 1973, based on each state's total expenditures for handicapped programming and total handicapped enrollment. These costs ranged from $1664 per student in Wyoming to $44 per student in Delaware. This wide range raises the question as to what the states included in the "total expenditures for the handicapped" category. For example, did states include only those funds that represented expenditures over and above the basic expenditures made for all students, or did they include all expenditures made for handicapped students? It may be that varying interpretations of what was asked for in these categories were, in part, responsible for the wide range of per enrollee costs.

Figure 1.1

Percent of Federal Funds (Part B) Expended for Handicapped (FY 1973)

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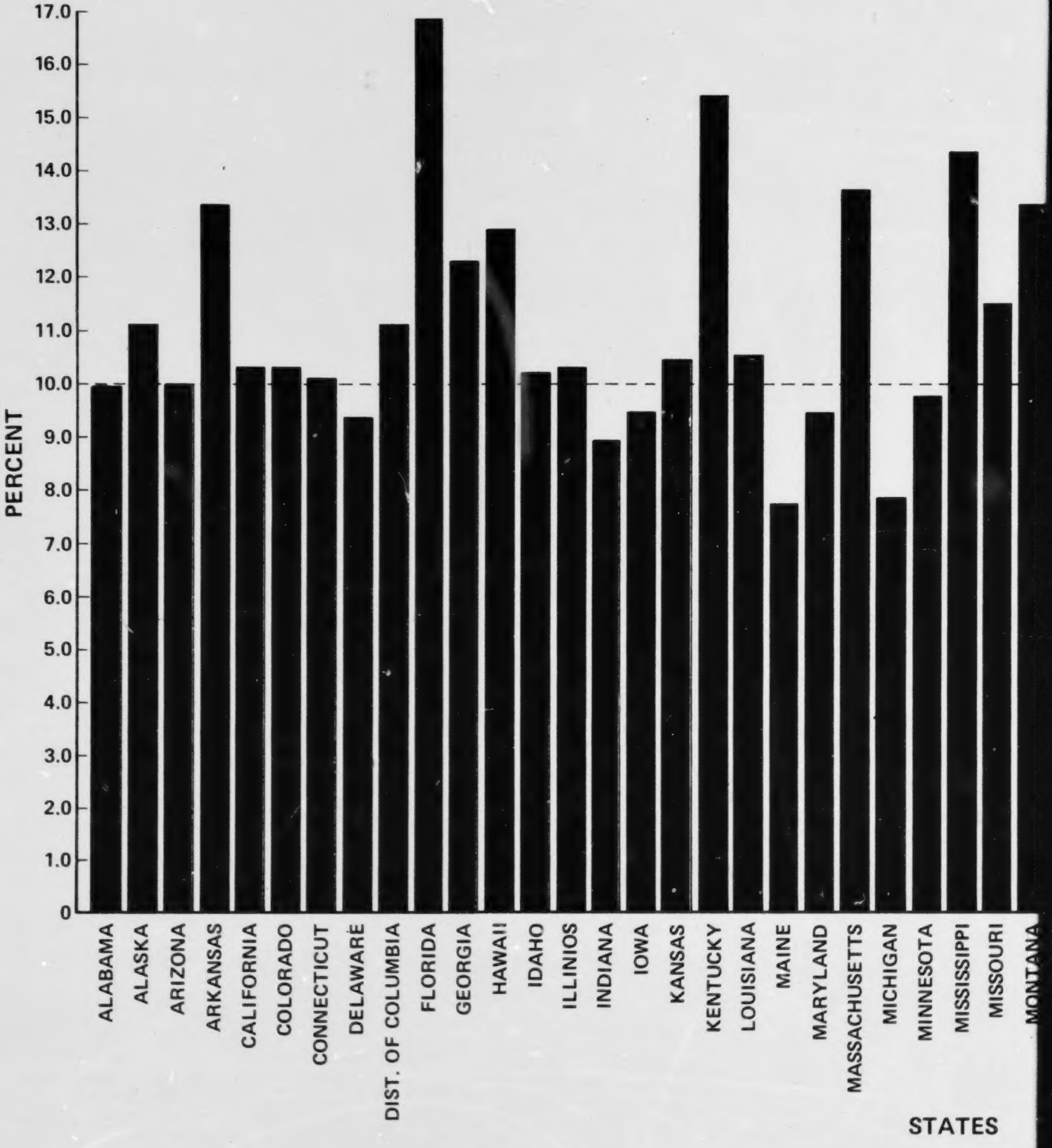

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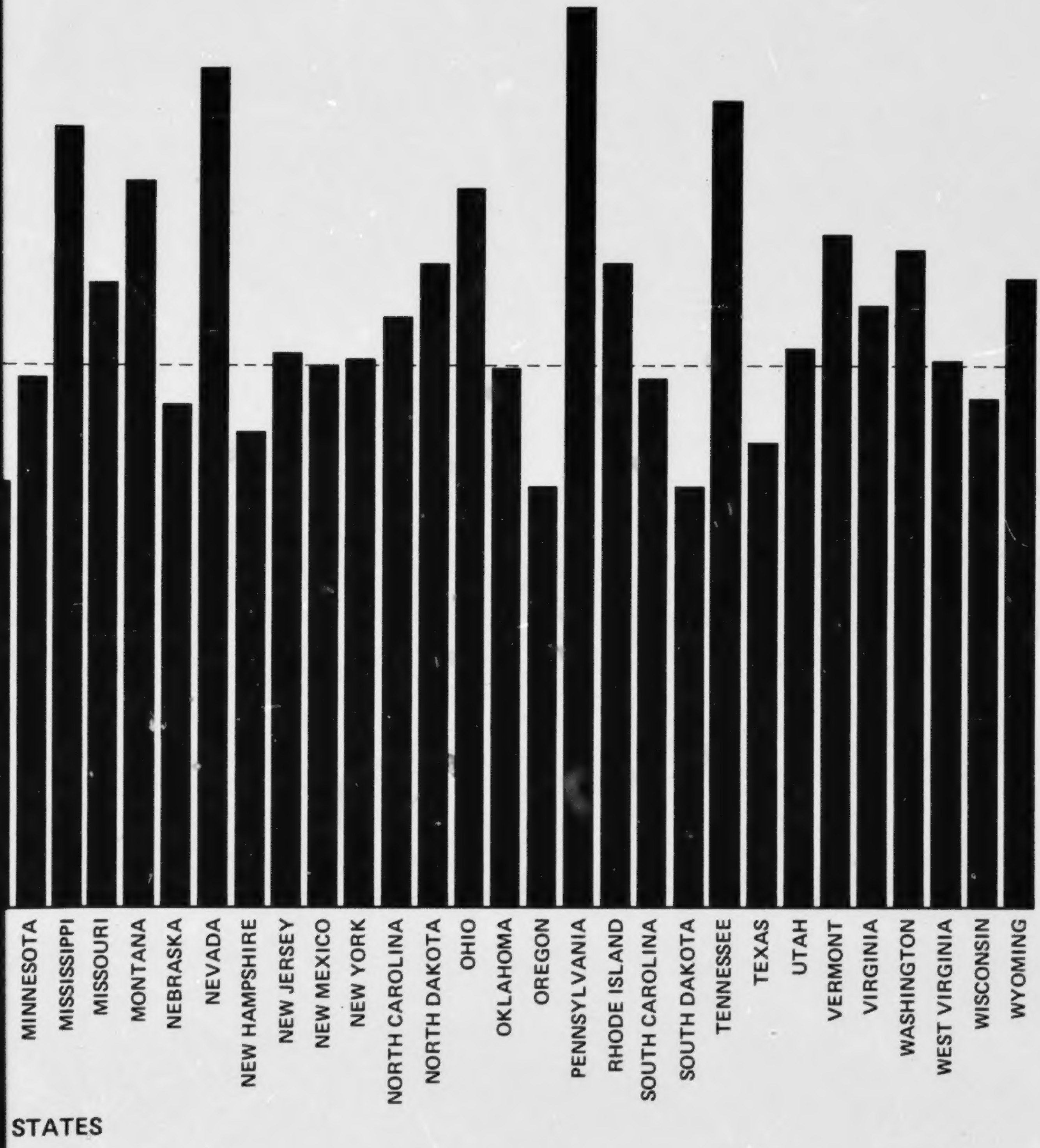

Figure 1.2

Cost Per Handicapped Student (All Programs - FY 1973)

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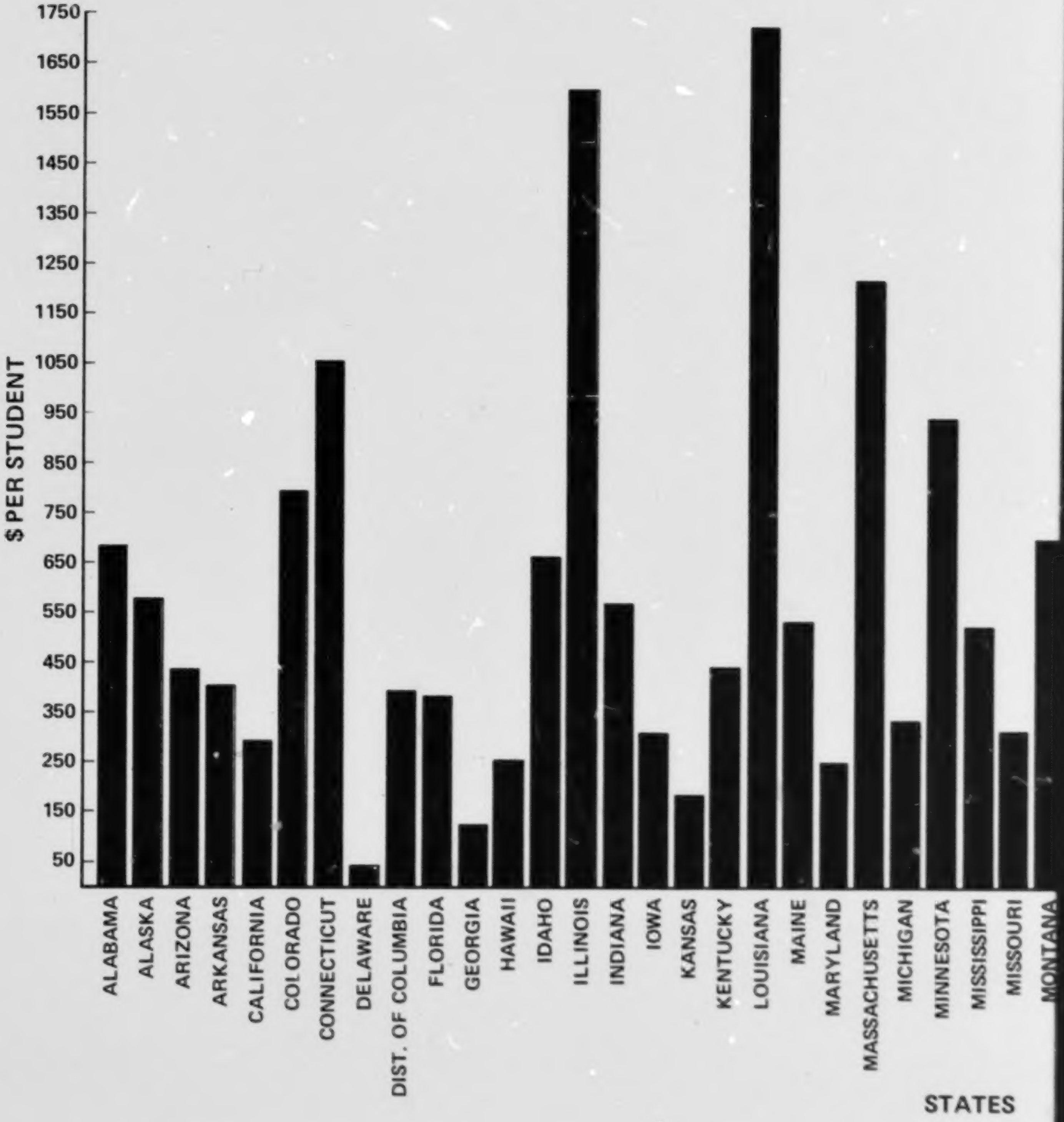

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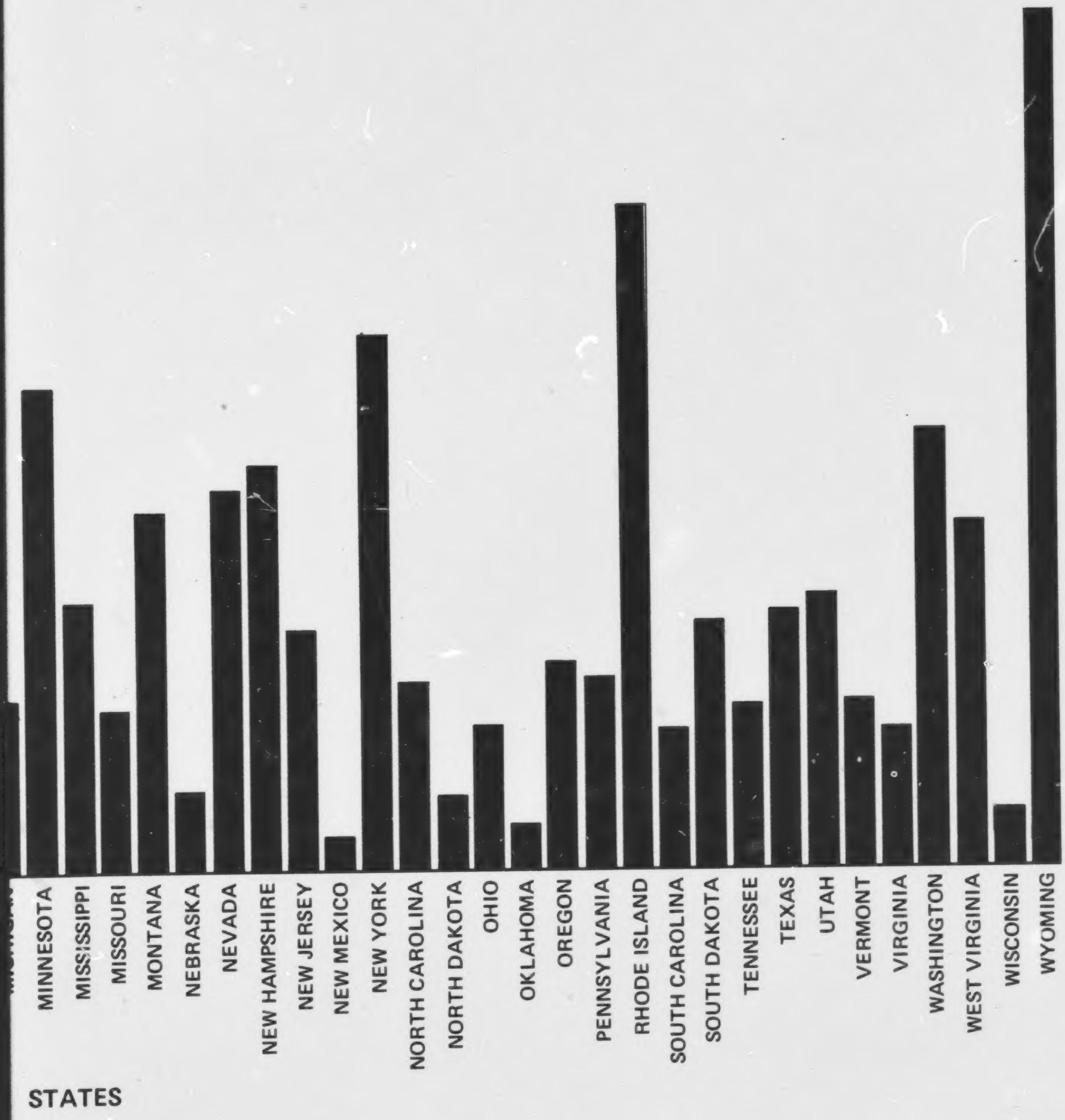

Figure 1.3

Comparison of Percentage of Total Vocational Education Funds Expended for Handicapped with the Percent of Total Vocational Education Enrollment that is Handicapped (FY 1973)

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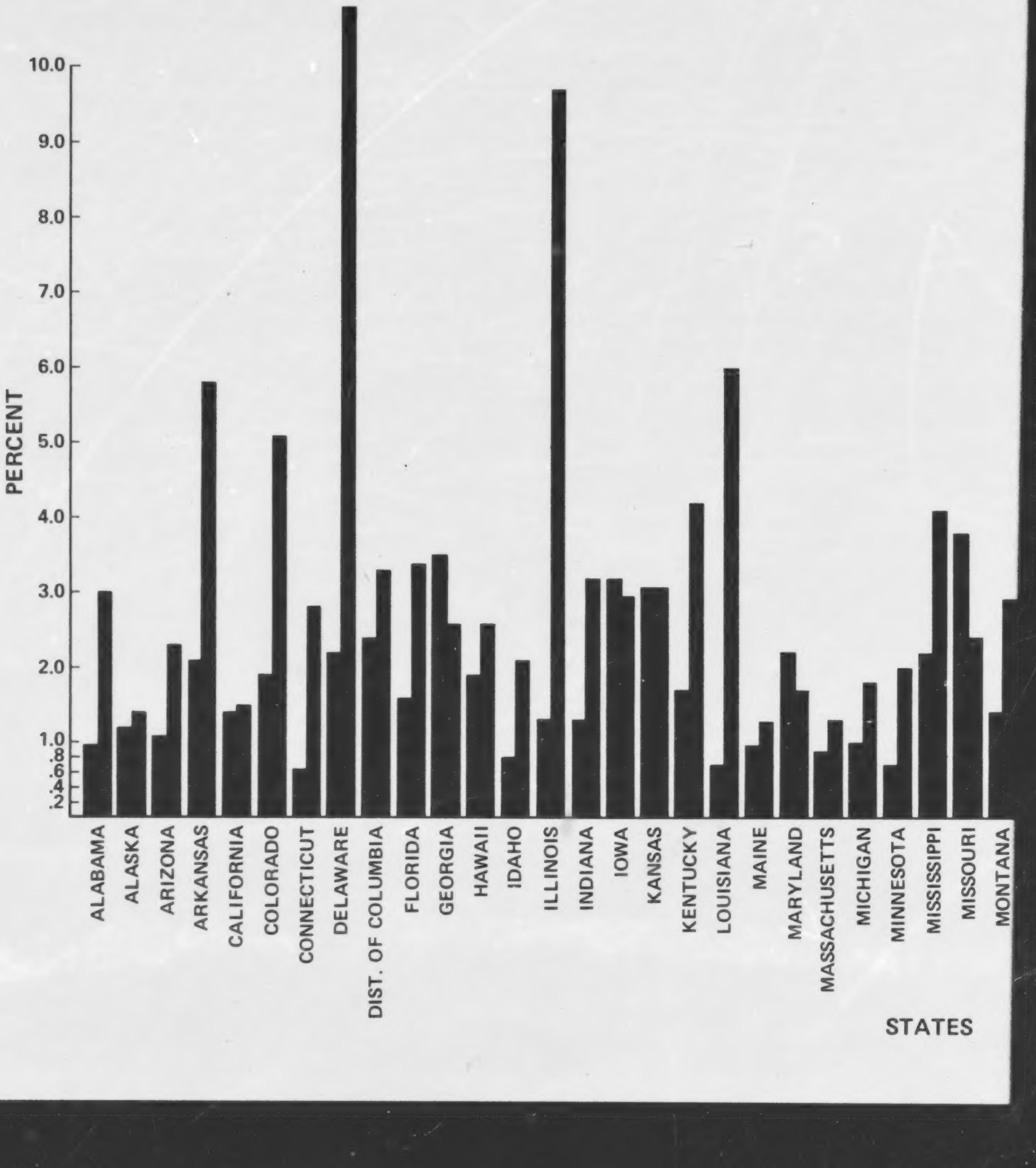

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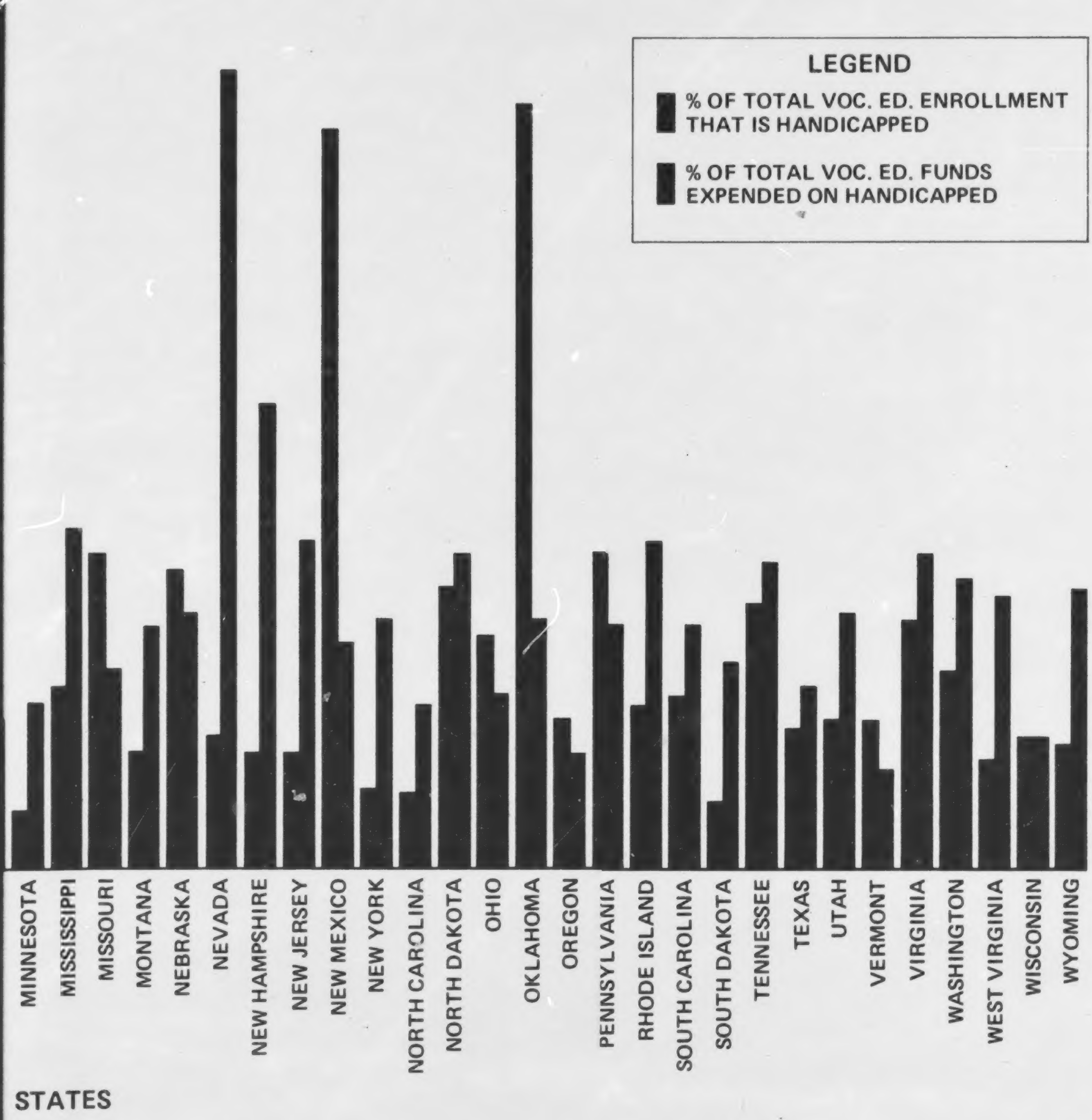

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Figure 1.4

Comparison of Total Vocational Education Funds Expended for Handicapped (all Programs) with Vocational Education Funds for Handicapped under Part B (FY 1973)

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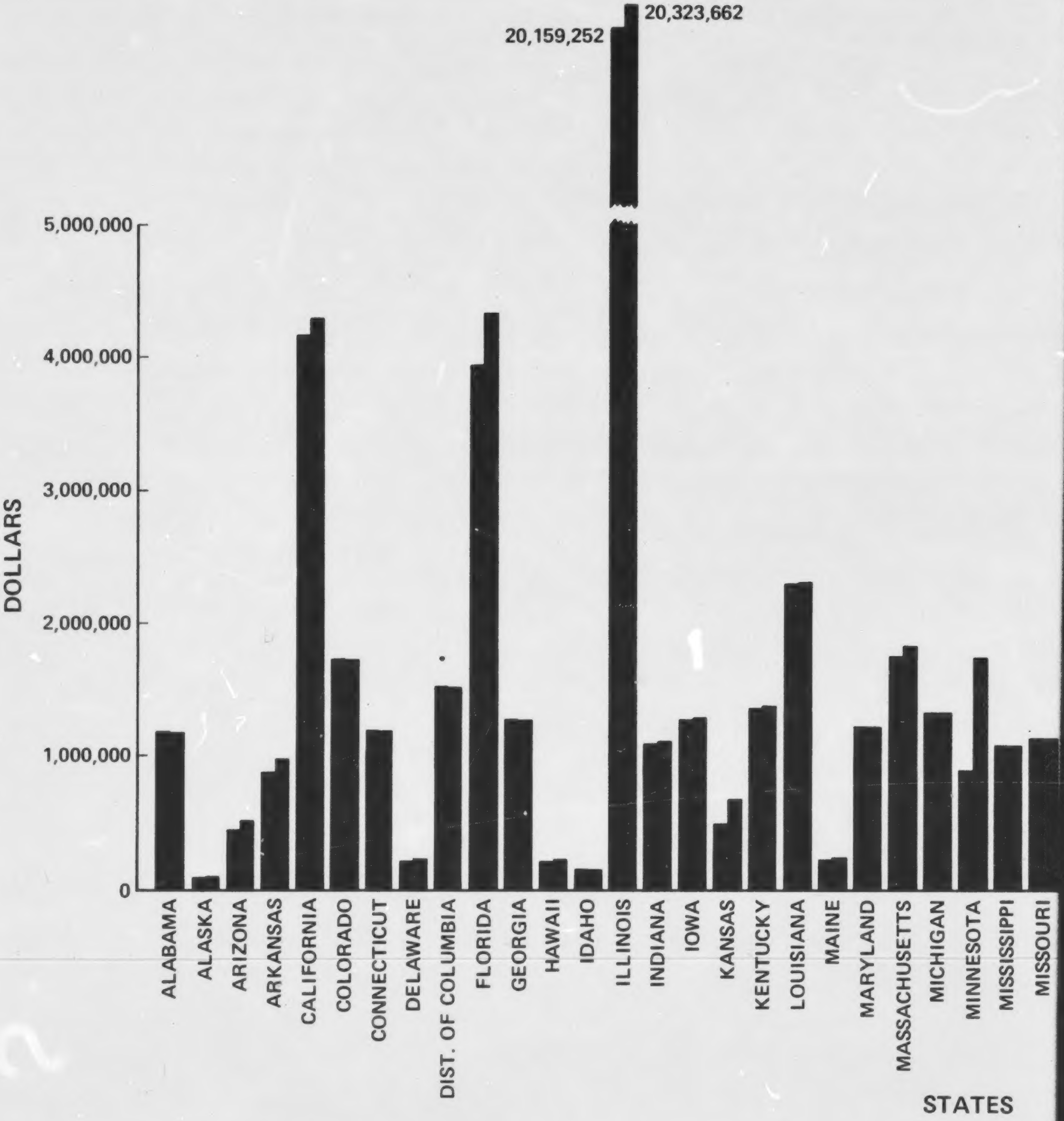

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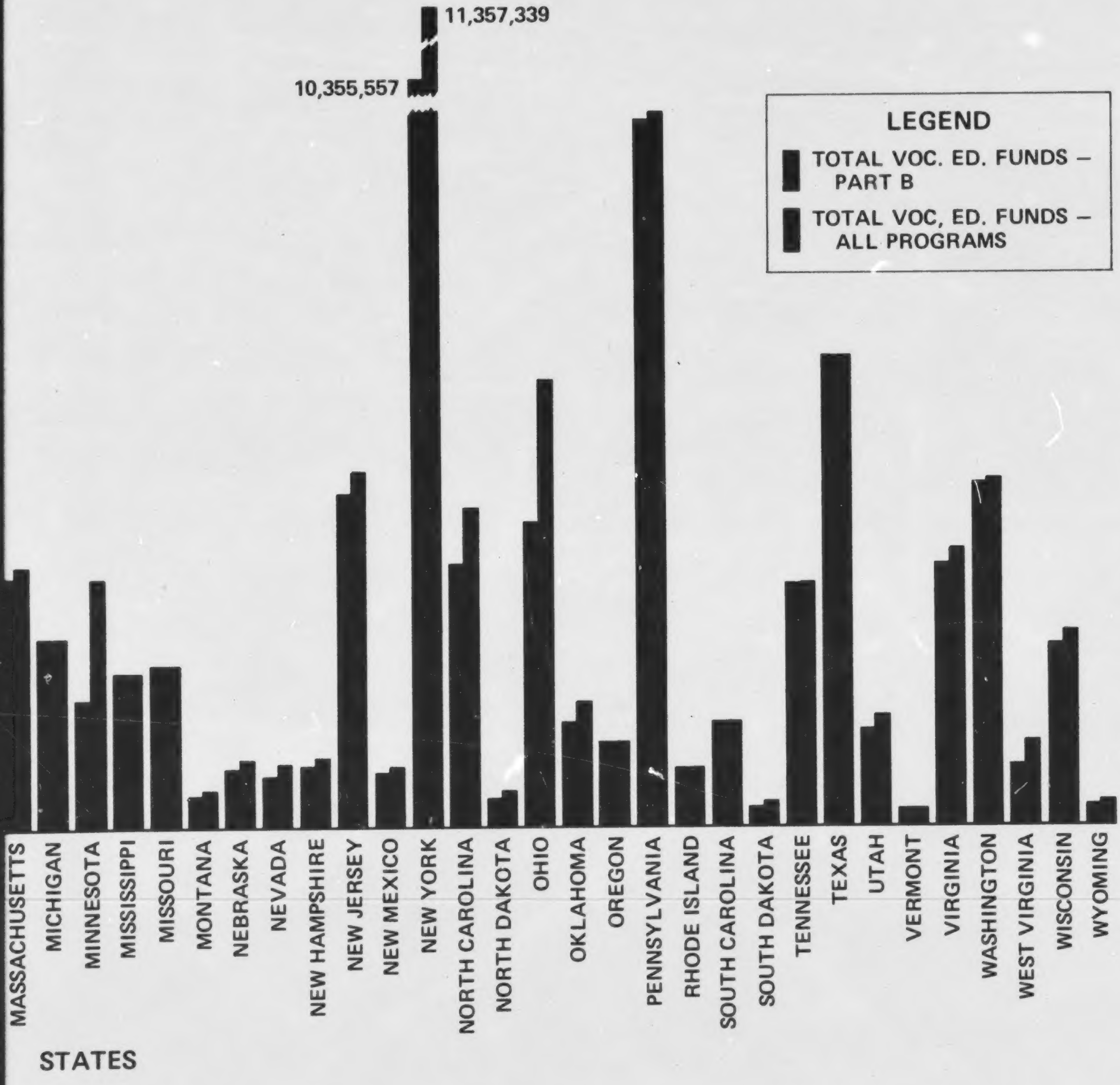

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Figure I.3 compares the percentages of total enrollments that were handicapped with the percentages of all vocational education funds expended for the handicapped in fiscal year 1973. It shows that in most states the costs for educating handicapped students were higher than the costs for educating the non-handicapped; that is, the percentages of funds spent for the handicapped were higher than the percentages of total enrollments who were handicapped. Thus, in 38 states, it appeared that per-student expenditures for the handicapped were higher than per-student expenditures for regular students. However, in twelve states, per-student expenditures for the handicapped appeared to be either the same or lower than those for regular students.

Figure I.4 provides concrete statistical evidence to support the contention voiced by most administrators interviewed in the field that without the Part B set-aside, there would be few vocational education opportunities for the handicapped. In seventeen states there is virtually no difference between total expenditures for the handicapped and total expenditures on programs under the Part B set-aside. In all but a few states, the differences are not significant.

In the process of analyzing national statistics, it was discovered that in several states the fiscal year 1973 expenditures reported to the Office of Education were different from the expenditure figures collected by ORC research teams during the state level assessment. In six states, where discrepancies were particularly large, letters requesting an explanation were sent to the six program officers.

Two explanations were offered: (1) the on-site figures included all funds expended during fiscal year 1973, including carry over funds from fiscal year 1972 allocations (the figures reported to the Office of Education did not include carry over funds), and (2) the on-site figures were derived from the "working records" of program officers, which may differ significantly from "official" fiscal records of funds actually spent during the year.

While the national statistics provided some interesting general insights into programming for the handicapped, probably the most important conclusion that can be drawn from them is that they often appeared to be incomplete and/or inaccurate. In many instances, the information presented in this report provides a more accurate picture of what was happening and what information was actually available at the state and local levels. However, one of the major problems uncovered by this study was the lack of available information -- from any source, local, state, or federal -- needed to monitor and evaluate vocational education programs for the handicapped.

Description of State Administrations

In order to describe the various patterns states have developed to administer the Part B set-aside for the handicapped, the administrative assessment is broken down into two main categories: (1) organizational profile, and (2) operational profile. The organizational profile describes the structures of vocational education departments, relationships with other agencies, and relationships between state and local administrators. The operational profile covers such topics as identification of the universe of need, program planning, project funding procedures, monitoring and technical assistance, and reporting requirements.

Organization Profile

The organizations were analyzed according to internal structure as well as with regard to relations with other agencies.

Structure of Vocational Education Departments

Although each state has its own job titles, the place in the organizational structure occupied by the administrator responsible for the handicapped program was similar in most states. The "program officer" in charge of handicapped programs operated at the third organizational level; that is, his immediate supervisor reported directly to the director of vocational education. In some states the bureau or unit in which he was located was a special one; e.g., "Bureau of Special Needs." In other states he was located either in the program planning unit or program operations. But in no state did the program officer fall lower on the hierarchial ladder than the level described above.

Only one state (one of the smallest of those surveyed) did not have a program officer who spent at least part of his time administering programs for the handicapped; however, in that state, the director of vocational education reported that he took "personal responsibility" for handicapped programming.

Of the 24 program officers, six had no responsibilities other than the handicapped. The remaining eighteen had additional responsibilities, usually pertaining to programs for the disadvantaged. With respect to the group with split responsibilities, the percentage of time allotted to handicapped programming ranged widely from 10 percent to about 70 percent, with the average about 25 percent.

Special situations existed in four states. In one, the director of special needs designated himself as "program officer" for the handicapped; other division staff members were assigned to work with the disadvantaged or to assist the director in administering programs for the handicapped. In two other special states, program officers with nominally divided responsibilities concentrated on the disadvantaged, while handicapped programming was handled in one case by the chief of program services and in the other by a supervisor of all special services. In the final special state, handicapped programs in each subject area were administered by the state supervisor for that subject area. There was no single individual in charge of handicapped programming.

In theory, state vocational education advisory councils are supposed to assist divisions of vocational education in initiating programs for the handicapped. The amendments charge such councils with planning and evaluation responsibilities and also require them to have one or more representatives "experienced in the education and training of handicapped persons." Almost all project officers surveyed were aware of their state councils and the liaison officers within the various agencies, and several of them could identify the handicapped specialists on the councils. However, although not one of the respondents complained of the ineffectiveness of the councils, none of them cited examples of council activity in any phase of the handicapped program. Apparently, there was virtually no concrete assistance provided by the councils, and none seemed to be expected by program officers.

Relations to Other State Agencies

Special Education: The organizational relationship between divisions of vocational education and divisions of special education are important to vocational education programs for the handicapped. Special education is the division of a state education agency that has had the most experience in working with the handicapped, that is geared to their identification and classification, that has staff trained in meeting the needs of the handicapped, and that often has experienced personnel located at the local level.

In most states the director of special education was on the same organizational level as the director of vocational education and, like him, reported directly to the commissioner of education. However, in several states the director of special education operated on a level that seemed roughly comparable to that of the handicapped program officer. One special education administrator complained that his program was much larger than that of the Part B handicapped administrator, yet he received the same salary and had about the same amount of authority. In one or two instances the special education administrator was classified as a specialist and seemed to have an organizational position even lower than that of the handicapped project officer. These cases, however, were the exceptions to the rule.

Generally speaking, there were three categories of relationships between divisions of special and vocational education. First, in Minnesota, the two divisions jointly funded the position of "coordinator." The coordinator's function was to work with personnel in both divisions to avoid duplication of effort and to bring the maximum possible amount of combined resources to bear on programs for the handicapped. At the time of the Minnesota interviews, the position had been filled for only a short time so that no assessment of its value was possible. However, there can be no doubt that this joint action constitutes a real attempt at cooperation and coordination between two divisions with responsibilities toward the same target group.

Second, in eight states, although new positions had not been created, individuals -- some located in special education and some in vocational education -- were charged with the responsibility of coordinating activities between the two divisions. Such action indicated a growing perception in many states of the need for inter-agency cooperation in serving the handicapped. However, unlike Minnesota's coordinator, these individuals performed their coordinating function in addition to other duties.

Third, in twelve states, although no attempt was made to establish an organizational relationship between the two divisions, vocational education submitted proposed projects to special education for review.

In the remaining four states, there appeared to be no significant relationship between vocational education and special education.

In several states, special education administrators made the point that, while special education input into vocational education programming was minimal or merely pro forma at the state level, a real working relationship was evolving at the local level. In its project visits ORC found that working relationships did, indeed, usually exist at the local level. In fact, in several instances the two agencies were so closely intermingled in projects that it was nearly impossible to separate them for analytical purposes. Rarely was special education's presence not felt in local projects. This development was spurred in several states by legislation that requires the participation of special education personnel (among others) in the identification and classification of handicapped individuals, and in program planning. One vocational education program officer noted that such requirements at local levels of operation made closer relationships at state levels inevitable.

Vocational Rehabilitation: Formal working relationships between divisions of vocational education and departments of vocational rehabilitation existed in fourteen states. In seven of these states, vocational education administrators stated that well defined, functional relationships with vocational rehabilitation make available a variety of services to handicapped students including: placement, counseling, student evaluation, planning assistance, purchase of services not otherwise available, and occasional joint funding of projects.

In the remaining seven states, administrators stated that although agreements existed with vocational rehabilitation, they generated little or no joint activity at the state level.

In the remaining eleven states, no organizational relationships with vocational rehabilitation were identified, although there may have been occasional joint activities at the local level.

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The different types of relationships encountered at the state level were also present in the projects visited. In Oklahoma the two agencies were so close that vocational rehabilitation administered many of the projects for the handicapped funded by vocational education. A more common relationship consisted of the employment of vocational rehabilitation counselors on project staffs, usually on a part-time basis.

Another group of projects did not have a direct operating partnership with vocational rehabilitation, but they did regularly refer program completers to vocational rehabilitation for placement or supportive services. A final group of projects had no contact at all with vocational rehabilitation.

There seemed to be a lack of agreement among states and among project administrators as to whether vocational rehabilitation can legitimately provide supportive and additional services to secondary level handicapped vocational education students. The most common explanation given for the lack of direct involvement by vocational rehabilitation was that its client population was older than vocational education's. However, the fact that in at least seven states vocational rehabilitation did provide services to students in the set-aside program indicates that similar arrangements could be reached in other states.

Employment Service: Only six states reported formal working relationships with the employment service, and four of these were apparently limited in the amount of activity that they produced.

This lack of interaction on the state level was reflected in a general skepticism toward the employment service at the project level. Only a few projects referred their completers to the employment service. Whenever possible, project personnel preferred to provide their own placement services.

Other: An occasional active relationship with welfare or with private organizations working with the handicapped was identified, but these were so few as to be insignificant.

In summary, there were a substantial number of formal relationships with divisions of special education, a somewhat smaller but still significant number with departments of vocational rehabilitation, and almost no other outside relationships that administrators believed were significant.

State - Local Relationships

State - local relationships were classified in three categories. These categories were ordered from those that seemed most direct and immediate to those that seemed most indirect. This ordering should not be interpreted as evaluative since, for example, an organizational relationship that is filtered through several administrative levels may be more supportive of local projects than a relationship in which the project officer communicates directly to the local administrator, or it may be less supportive.

In twelve states, program officers usually communicated directly with local project directors. The amount and nature of the communication that resulted from this organizational characteristic varied widely. In some states contact went no further than an on-paper application and reporting system. In most instances, however, there was direct contact by telephone or in person between state program officers and project staff, and in a few cases there seemed to be relatively close, personal, working relationships between state and local staff.

In another group of ten states there was direct contact between state program officers and local project staff in some areas, but in others communication was filtered through intermediaries. For example, in some states the application and funding procedures involved a direct relationship, but once funded the projects were supervised or evaluated by either special education personnel or vocational education regional staff.

In the remaining three states there were intermediate organizational levels between the state staff and individual projects that seemed to preclude direct contact between project officers and the local projects. In two of these states this organizational pattern was an outgrowth of their funding pattern which consisted of entitlements to local education agencies which then had independent authority to fund projects. In the remaining state a close working relationship with geographic "District Councils" seemed to be the focus of the project officer's relationships with the projects funded by the state.

Operational Profile

Operations were analyzed from a number of viewpoints in order to determine operational profiles.

Universe of Need

A standard initial step in the operation of a program is the determination of the universe of need to be addressed by the program. In other words, who needs the services this program can provide? In the case of the Part B set-aside, this universe would be those handicapped students in a state who could benefit from vocational education. Ten of the states surveyed indicated that they did not collect information on the universe of need. The most common explanation they gave was that this was a local responsibility to be dealt with by local education agencies in their project proposals. Two of these states distributed money to local education agencies on a straight entitlement basis (a process that will be described in greater detail in the project funding section of this chapter). These entitlements were determined on straight population projections. It was then up to the local education agencies to identify needs, establish priorities, and fund projects accordingly. In the other eight states in this group, project funding decisions at the state level did not utilize a universe of need factor.

Whether administrators in the other fifteen states who indicated that there was some gathering of universe of need statistics in their states actually used such statistics in program planning decisions is questionable. Seven of these administrators said that this information was gathered by special education or vocational rehabilitation, but there was little evidence to indicate that the information itself ever reached vocational education program officers. In three other states it was not clear from the interviews just how this information was gathered, and, once gathered, whether or not it was used.

Four states indicated that they prepared and used universe of need statistics within their divisions. However, two merely prepared projections based on national incidence of handicapping condition projections. The research units of the remaining two states prepared special reports on the numbers and types of handicapped students throughout their states, but administrators tended to downgrade their value.

It seems clear that universe of need statistics were not considered a priority in the 25 sample states. The typical state administrator saw himself as a processor and evaluator of project proposals, rather than as a creator of program priorities.

It should be pointed out, however, that virtually all state administrators reported that projects proposed by local education agencies or by schools within local education agencies are based on student records -- from kindergarten on up -- which are a source of information regarding the number of handicapped students enrolled and the incidence of handicapping condition. Since state law in all 25 states requires that all children register for school, regardless of their physical or mental infirmities, it should be possible to determine the universe of need in each state. What is not clear is the extent to which school attendance laws are enforced in the various states, the thoroughness of diagnostic procedures, and the extent to which the information is analyzed by local education agencies, or even by the schools. Interviewees at the project level did not usually describe a clearly defined method for determining the universe of need. Often, they felt that determination was the responsibility of the home base school or of special education. Their program, they said provided services. It was up to others to determine who should -- within the guidelines -- receive those services. This issue of who should determine the universe of need is described in greater detail in the project level assessment.

Program Planning

Planning -- the process by which program objectives, based on information about the world in which programs operate and on feedback from past operations, are established -- occurred in only a handful of the states surveyed. Without a feedback system to provide information on the universe of need and the outcomes of programs already in operation, effective state level planning was impossible. In addition, state divisions of vocational education appeared to have little authority over local education authorities. Thus, even if state plans based on reliable data were adopted, the implementation of such plans would be dependent on the "sales" abilities of state administrators.

In some instances states have established preferential funding policies; e.g., to encourage programming with work experience components. Also, there is a built-in planning element in some of the allocation formulas used by states. Neither of these efforts, however, are components of "comprehensive plans". Even in those states where allocations or inducements are utilized, the inclination is to leave as many options as possible open to local education agencies, rather than to focus efforts on particular types of programming.

The guidelines for state plans specify that the goals and objectives of programs are to be clearly stated. In spite of this requirement, in most instances the objectives are couched in broad terms, such as "to provide the handicapped students of the state with necessary vocational education." This type of objective lends itself neither to concrete planning nor to evaluation.

State project officers did not appear to consider "planning" one of their major responsibilities. To a certain extent this seemed related to attitudes toward the drafting of state plans. The "right words" must be put down on paper in order that funds may be obtained, but such "planning" has very little to do with "day-to-day operations." This attitude was implied in the comments of several state administrators and was supported by the lack of evidence of specific state plan objectives being actively pursued.

One other factor that may have militated against state level planning was the already noted independence of local education agencies and the willingness of the states to accept this condition. Several states did, in fact, require local projects to state their goals and objectives in clearly measurable terms and predicated future funding on the fulfillment of those objectives. Perhaps, then, the lack of state level planning was due more to a belief that planning is a local rather than a state responsibility, than it was to a general skepticism regarding the value of planning itself.

As described in the project level assessment, however, planning seems to be as informal at the local level as it is at the state level.

Project Funding Procedures

Three states did not fund projects directly. Two allocated funds to local education agencies, which, in turn, funded "projects". The funds in these two states were allocated according to straight census projections of school populations. In one of these states, the allocations to some local education agencies were so small, that the local education agencies chose not to use their entitlements. When this occurred, the funds were reclaimed and used to finance "special projects." The third state that did not fund "projects" reimbursed schools for each credit hour a handicapped student was in a vocational education program. Theoretically, the additional money was used to provide extra services or to lower teacher-pupil ratios in classes containing handicapped students. That state used the "project" approach to fund programs in institutions exclusively for the handicapped.

In the 22 states that funded "projects," a number of questions can be applied to the funding process:

1. Is the funding a formal or an informal process?
2. Is an allocation formula involved in the funding process or are all state projects given equal consideration?
3. Are there criteria on which funding decisions are based?
4. Are other divisions involved in funding decisions?
5. Are other divisions involved in projects at the local level?

All but two of the 22 states had formal applications for projects. Two states merely required letters of request, outlining the purposes and costs of the projects. Of the remaining 20, four funded some "supportive" projects for special staff and/or equipment for handicapped students enrolled in regular vocational education classes. Applications for such projects generally required very little information. Applications in eight states required little information even for special projects (projects for handicapped students only); e.g., designation of the type of handicapped students to be served is often not required. Very often, the purposes of proposed projects were stated in general terms, such as "to provide assistance to those handicapped individuals that can be identified in the vocational program." In addition, in at least three states, detailed applications were required for "new" projects, but little or no information regarding the projects was required on subsequent requests for refunding.

On the other hand, twelve states required applications to specify project goals, staffing, support, and budgeting. The application form in one state was seventeen pages long. Even among these twelve, however, the priority was for fiscal rather than program or client information.

In those states where detailed applications were required, guidelines (based on federal publications) were usually provided with application forms, and informal technical assistance in preparing applications was available to local education agencies or school personnel.

Eight states that funded projects directly utilized allocation formulas to weight applications (or proposals). They were based on such factors as per capita income, rate of unemployment, and projected incidence of handicapping condition. In three of these states, such formulas were utilized only if budget requests exceeded the total funds available for the states. In the remaining fourteen states all applications were given equal consideration.

In ten states, special education and/or vocational rehabilitation personnel reviewed project applications. This was the most common area of cooperative activity between vocational education and other agencies.

With regard to funding, projects generally fell into three categories. In three states, some projects were jointly funded by vocational education and special education. In one of these states, all but a few of its projects were jointly funded. In three other states special education and/or vocational rehabilitation supported projects funded by vocational education by providing staff or equipment for the project's activities. Special education may have been involved at the local level in the remainder of the states, but the projects remained essentially independent vocational education projects.

Several states used set-aside funds as "seed money," that is, projects were funded only if local education agencies or schools agreed to gradually increase local financing of the projects, so that eventually the projects would be 100 percent locally funded. One state required assurance that projects would be locally funded during the second year of operation; most required a gradual reduction of federal funds over a three to five-year period. A follow-up study should be carried out to determine how the seed money concept is working out in practice.

In addition to this complex mix of funding procedures, there was a wide variety of project types (which will be described in the project level assessment). The freedom granted to states in developing their programming may have been a two-edged sword. States were given the opportunity to develop programs in response to local needs, but the complex variety of funding formats and program types that evolved makes comparative assessments difficult.

Monitoring and Technical Assistance

Administrators in only five states said that the personnel and resources available for project monitoring and evaluation were adequate. Only administrators in small states said they were able to visit every project each year. Nevertheless, systems that evaluated all projects once every two or three years existed in all five states.

Twenty states had not established systems for evaluating or monitoring projects. Four relied on "self-evaluations" conducted by the local education agencies or schools. In all but one state, program officers occasionally made on-site visits to projects, either at their own initiation or at the request of project administrators. Three states relied on subject area supervisors or in-state regional staff for monitoring and evaluation, and one of the three made extensive use of special education in-state regional staff for these purposes.

Nine states provided technical assistance to local projects when requested, but this may occur informally in even more states through telephone calls for information, proposal negotiations, etc.

The major type of technical assistance provided by state personnel was help in drafting proposals and in reworking proposals already submitted. Occasionally, assistance was given in locating qualified staff, and in restructuring programs. Two states have sponsored technical assistance conferences. However, it was only in the project level interviews that ORC encountered an occasional mention of other technical assistance vehicles, such as AMIDS-sponsored conferences.

Reporting Requirements

It was difficult to collect fiscal and enrollment data from most of the states. The lack of data available from program officers will be explored in detail in the financial profile (which follows this section) and in the project level assessment.

One reason for the data gap was that reporting procedures throughout the states were undergoing considerable transition. Partially in response to federal pressures and partially the result of "natural evolution," fiscal and program reporting requirements were being tightened and retrieval systems were being installed. During the period when old structures were being dismantled and new structures were being installed, it was inevitable that some data were "lost."

Fiscal information was not available in any standard format. Each state had developed its own unique reporting system. Some required monthly reimbursement requests, some quarterly, some yearly. Some paid out funds in advance while others only reimbursed for expenditures already incurred. Some states did not require year end reports; all that was available from them was a continuing series of monthly reports. Virtually all states experienced problems with unexpended funds. While some states recalled all such funds and redistributed them along with the following year's allocations, others allowed unexpended funds to remain with the projects that originally received them. Thus, carryover funds were difficult to locate. This lack of clarity with regard to carryover funds also made it difficult to make comparisons between the data collected on-site and the data reported to the federal government.

In most states, it was not possible to identify Part B funds that were used for state administration expenses.

In summary, state fiscal reporting was characterized not so much by a lack of information, but by a lack or orderliness in its maintenance and a lack of comparability. Personnel in most states waited until the last possible moment before reviewing allocations and expenditures. As late as December, 1973, many states had not submitted their final fiscal reports for fiscal year 1973. In some states, although the information had been collected, summaries had not been prepared.

Enrollment information was often not available from anticipated sources such as interim reports, monthly or quarterly reports, final reports, completion and placement reports, etc. In fact, in eleven states enrollment figures for handicapped programs were not prepared or collected at all, and in those states where enrollment information was available, it was often not broken down by type of handicap, by type of training, or by any other category.

There were, however, some indications of progress in this area. A few states provided detailed descriptions of new reporting systems designed to provide comprehensive information on student enrollment and progress. Such systems are geared to the collection of follow-up information, information that only five states claimed to collect and that no administrator was able to produce during the state visits. It may be at least two years before such computerized systems begin generating specific, useful data on the handicapped.

Suits brought against at least five state departments of education and legislation resulting from such suits have adversely affected the collection of enrollment data. For example, suits have charged that state departments of education have classified blacks and other minority group members as "emotionally disturbed" or "mentally retarded" without adequate evaluation. One response to such pressures is to classify all handicapped students in one category -- "special needs." Such a tendency could make federal efforts to define more precisely the handicaps of individual students more difficult.

In the face of so many negative observations, it is important to note that in each of the states a substantial amount of programming for the handicapped exists where it did not exist before. It should also be emphasized that state level administrative costs for the Part B set-aside program were extremely low. The employment of only one program officer in each state -- many of whom are part-time -- limits the amount of administrative action possible at the state level.

Financial Profile of the States

The major problems involved in creating a financial profile of the sample states were: (1) the fiscal information collected during the study was incomplete, and (2) for reasons that will be discussed below, the data collected by ORC was often not comparable either between states or with data reported by the states to the Office of Education.

Eight states were unable to identify final expenditures for fiscal year 1973. Several of these states had not aggregated this information as much as five months after the close of the fiscal year. All, however, were able to provide either anticipated expenditures for fiscal year 1973 or actual expenditures for fiscal year 1972.

The fact that this information came from three different categories -- actual fiscal year 1972, anticipated fiscal year 1973, and actual fiscal year 1973 -- illustrates the lack of comparability that hindered efforts to draw a financial profile of the states.

All but two states surveyed could provide ORC with fiscal year 1973 data, but of the 23 states, five had to resort to anticipated expenditures. Only fifteen states could produce actual fiscal year 1973 expenditures. In addition, six of the 25 states could not break down expenditures by federal, state and local sources. This inability is difficult to explain, since this is a categorical breakdown that the states must make in their federal reports. Three states could not produce budget breakdowns even in such general categories as "salaries" and "other." These inconsistencies limit comparisons among the states with regard to patterns of funding and spending.

An additional problem is the diverse sources from which fiscal data was drawn. Printouts frequently provided data from undetermined sources. In some cases, the figures were taken from anticipated budgets in project applications. In several states it was difficult and sometimes impossible to identify Part B expenditures other than those for financing projects.

Patterns of Funding

In spite of these constraints, findings can be drawn that offer some insight into the funding patterns of the sample states.

Table I.2 lists fiscal year 1973 expenditures (either actual or anticipated) for each state. The two exceptions are California and Georgia, which are represented by their fiscal year 1972 expenditures. For all but five states these figures are broken down into federal and state/local categories.

Total expenditures for Part B programs ranged from $128,919 in Wyoming to $5,045,267 in California. Thirteen of the states expended more than $1,000,000 for handicapped programming.

Table 1.2

FY 1973 Expenditures for Handicapped Programs
25 Sample States

State	Federal	State/Local	Total
Alabama	N/A	N/A	1,180,438
Arizona	366,528	86,525	453,053
California	2,316,538**	2,728,729**	5,045,267**
Florida	1,157,527	-0-	1,157,527
Georgia	N/A	N/A	891,748
Idaho	101,995**	81,841*	183,836*
Illinois	1,387,387	1,387,387	2,774,774
Kansas	N/A	N/A	354,791*
Kentucky	652,370*	12,930*	665,300*
Maryland	390,068	958,036	1,348,104
Massachusetts	1,170,822	405,120	1,575,942
Michigan	897,407	-0-	897,407
Minnesota	534,408	370,152***	904,560***
Missouri	N/A	N/A	584,186
New Jersey	850,075	1,096,772	1,946,847
New York	N/A	N/A	2,520,935
North Carolina	980,784	943,637*	1,924,421*
Ohio	2,227,870	417,621	2,645,491
Oklahoma	N/A	N/A	402,495
Pennsylvania	2,431,738	627,611	3,059,349
Tennessee	1,053,862*	415,593*	1,469,455*
Texas	N/A	N/A	3,000,000
Washington	194,629*	138,978*	333,607*
Wisconsin	303,855	41,434	345,289
Wyoming	109,581	19,338	128,919

N/A = Figures not available
* = Anticipated FY 1973 figures
** = FY 1972 figures
*** = Includes Special Education funds

Table 1.3 takes a closer look at the relationship between federal and state/local contributions to state programs. In two states -- Michigan and Florida -- programs were supported 100 percent by federal funds. In five other states programs received at least 80 percent of their funds from the Part B set-aside. On the other hand, in five states one-half or more of the cost of handicapped programs came from sources other than the Part B set-aside. In Maryland 71 percent of the funds for the handicapped program came from other than Part B sources.

Patterns of Spending

The most complete spending characteristic that emerged from the data collected is a gross breakdown between "salaries" -- both contact and non-contact project personnel -- and "other" -- materials, supplies, travel, etc. Table 1.4 indicates the percentages of each state's expenditures that fell into these two categories. Only three states could not provide such a breakdown. In only two states -- Massachusetts and Minnesota -- was more expended in the "other" category than for salaries. In thirteen states more than 70 percent of the funds were expended on salaries.

The most important conclusion to be drawn from the fiscal information gathered at the state level is that the data lack uniformity and verifiable or "official" status. In order to make any valid comparisons between state fiscal patterns, it will first be necessary to establish some form of exact accounting in which allocations and expenditures can be identified, categorized, and verified.

Table I.3

Percentage Breakdown by Federal and State/Local Contributions of Fiscal Year 1973 Expenditures for Handicapped Programs

25 Sample States

State	Percentage Federal	Percentage State/Local
Alabama	NA	NA
Arizona	81%	19%
California	46%	54%
Florida	100%	-
Georgia	NA	NA
Idaho	55.5%	44.5%
Illinois	50%	50%
Kansas	NA	NA
Kentucky	98%	2%
Maryland	29%	71%
Massachusetts	74%	26%
Michigan	100%	-
Minnesota	59%	41%
Missouri	NA	NA
New Jersey	44%	56%
New York	NA	NA
North Carolina	51%	49%
Ohio	84%	16%
Oklahoma	NA	NA
Pennsylvania	79.5%	20.5%
Tennessee	72%	28%
Texas	NA	NA
Washington	58%	42%
Wisconsin	88%	12%
Wyoming	85%	15%

Table 1.4

Percentage Breakdown by Category of Fiscal Year 1973 Expenditures for Handicapped Programs -- 25 Sample States

State	Percentage Salaries*	Percentage Other**
Alabama		
Arizona	N/A	N/A
California	90%	10%
Florida	67%	33%
Georgia	78%	22%
Idaho	72%	28%
Illinois	N/A	N/A
Kansas	87.5%	12.5%
Kentucky	84.5%	12.5%
Maryland	80%	20%
Massachusetts	46%	54%
Michigan	95%	5%
Minnesota	48%	52%
Missouri	60%	40%
New Jersey	52%	48%
New York	78%	22%
North Carolina	84%	16%
Ohio	85%	15%
Oklahoma	73%	27%
Pennsylvania	61%	39%
Tennessee	88%	12%
Texas	N/A	N/A
Washington	54%	46%
Wisconsin	57%	43%
Wyoming	80%	20%

* = Salaries includes both contact and non-contact project staff.

** = Other includes materials, supplies, equipment, travel, etc.

Issues and Policies

During the course of the interviews with state vocational education directors, program officers, and state directors of special education, the respondents were asked about issues which related to the federal effort to increase vocational education opportunities for the handicapped. In addition, most of the interviewees suggested other issues and problems that they felt were relevant to the study. These observations, although essentially supplemental to the study, are important in at least two ways: they identify issues that are important to operations at the state level, and they provide some insight into the attitudes and concerns of those whose cooperation must be obtained if priorities and procedures regarding the Part B set-aside are to be changed.

Funding Considerations

When asked whether they favored set-aside funds designated exclusively for the handicapped, virtually all the respondents -- both state directors and program officers -- answered in the affirmative. Only three answered negatively. The reason for such positive response: if the set-aside policy had not been enacted, programming for the handicapped would not have occurred. As support for this contention, the respondents stated that prior to the 1968 amendments, programs for the handicapped were virtually non-existent in most states.

Three state directors were opposed to the set-aside on the grounds that such "restrictions" infringed on a state's ability to react to its own unique needs and priorities. One director expressed what was probably the most commonly held point of view among the interviewees when he said that he believed, in principle, such priority setting should be the responsibility of the state, but as a matter of practicality no programming existed before the set-aside. The amendments served to force the refocusing of state priorities. Without the amendments, he noted, groups not in a majority run the risk of exclusion from any consideration at all.

In two states where directors were opposed to the set aside, the project officers indicated that they favored the set-aside, but in neither state did this point of disagreement seem to create any operational problems.

Earmarking Funds for Program Categories

Generally, the respondents had no quarrel with earmarking funds for Parts G and H programs. However, several stated that cooperative work education or work experience components are desirable for all vocational programs, implying that a better policy might be to increase Part B allotments with strong incentives to include work experience components in projects for the handicapped.

Revenue Sharing

Administrators in all but three states expressed strong opinions that revenue sharing was likely to have a negative effect on vocational education in general and on programming for the handicapped in particular. They felt that with revenue sharing the distribution of funds would become a local political decision in the hands of "non-educators" and "pressure groups." Vocational education would suffer because it still has not established itself with the general public as equal in importance to academic education. The handicapped would suffer particularly in this situation because of the "tyranny of the majority," with virtually all funds going to those groups with the greatest number of votes and the loudest voices. Other criticisms of revenue sharing were that it would result in a top heavy administration of funds, since each local unit would need personnel for planning, allocating, evaluating, etc. -- activities now centralized at the state level. Also, there was some concern that personnel at the local level might not be as aware of the needs of the handicapped as personnel at the state level whose primary responsibility was to promote programs for the handicapped.

One state director felt that revenue sharing would have no effect on programming for the handicapped, and two others indicated that its effect need not be negative if pressure from parents of handicapped children and legislation requiring mandatory special education services can be developed in all the states.

Joint Funding of Projects

As noted in the section on state administration, the patterns of funding that have developed in several states raise some fundamental policy questions. In a few states projects were either funded jointly or carried out jointly by vocational education and special education (and sometimes vocational rehabilitation). Problems related to the comingling of funds seem to have been avoided in these states. The Part B set-asides can be tracked at least as easily in these states as they can be in states that did not engage in either joint funding or joint administration of projects. Minnesota, for example, had a contract format with its projects that clearly identifies the source of each funding amount.

Funding of Integrated Projects

The integration of handicapped students with regular students in regular classes also presents problems in tracking Part B funds. Several administrators said that the major reason they fund "special" classes is to avoid losing track of funds set aside "exclusively for the handicapped." In some cases, at least, this concern seems to be more than a rationalization. There is a need for fiscal guidelines to encourage states to integrate their programs. The experience of a state such as Michigan that has successfully funded integrated programs within the constraints of the Part B requirements could be used in drafting such guidelines.

Program Considerations

Two key considerations were involved in the programs for the handicapped. They were integration of classes and work experience.

Integration of Classes

The need for guidelines in the funding of integrated programs is highlighted by the fact that there is almost universal support among the administrators questioned for increasing the placement of handicapped students in regular classes. In fact, legislation in several states specified that segregated classes should be established only when there is no way that handicapped students can succeed in regular classrooms, regardless of the supportive services involved.

Administrators noted, however, that there are several barriers to the fulfillment of this goal. A frequently mentioned problem was the lack of regular vocational education staff sensitivity to and skill in dealing with the problems of the handicapped. Several administrators believed that there must be an increase in staff training if the widespread use of integrated programming is to become a reality. Two administrators expressed fear that "mainstreaming" the handicapped would reduce the amount of special funds that would be set aside for the handicapped. Regardless of the difficulties, integration of the handicapped into regular classes whenever possible is one of the issues most strongly supported by the administrators questioned.

Work Experience

Almost all of those questioned believed that work experience is critically important to every vocational education student. However, this is the ideal, and the reality of programming for the handicapped is far from reaching this goal. As noted above, some administrators believe that there should be an emphasis on work experience across the board, rather than a strategy which develops a small number of special work experience projects outside the mainstream of regular vocational education programs.

As will be noted in the project level assessment, Part G programming for the handicapped on the secondary level was apparently non-existent. Three reasons often given for the lack of Part G programming were (1) Part G funds were too limited to allow for the establishment of special programs; (2) Part B programs for the handicapped usually have work experience components anyway; and (3) Part G programming is reserved for the disadvantaged.

Staffing

In the 25 states visited, ORC found three black project officers, three women project officers, and no officers who had visible handicaps. In other words, only six percent of program administrators were from ethnic minorities, an imbalance that is aggravated by the fact that most of the project officers also had major responsibilities in dealing with the disadvantaged, many of whom were from ethnic minorities.

The fact that only three program administrators were women may be a reflection of the general exclusion of women from upper level administrative positions in most industries. However, it is interesting to note that in contrast to the scarcity of women in administrative positions in vocational education, there was a large representation of women in special education administrative positions. What traditional career patterns or prejudices this reflects is an interesting question, but one outside the scope of this report.

Other Considerations

In spite of the specific instances of cooperation noted in this report, the majority of the special education personnel interviewed said that contact between the two agencies is less than it should be. They specifically criticized the fact that vocational education rarely sought special education's help in identifying the handicapped, even though useful information emanating from special education surveys or census data was available. Vocational Education was criticized for not clearly defining a process of identification and classification, for sometimes confusing the handicapped and the disadvantaged (a confusion noted independently by ORC researchers), and for too often including in special programs handicapped students who could succeed in regular classes.

Special education administrators also stated that the training received by vocational education instructors did not prepare them for work with the handicapped.

Despite these criticisms, special education respondents generally expressed positive opinions regarding vocational education's initial plunge into programming for the handicapped. They reported that the projects are of high quality, and all things being equal, the handicapped could benefit from them. However, special education personnel seemed to feel that the programs are serving only a small portion of the handicapped that are in need of skills training. There is no way of verifying these perceptions, because there is so little concrete information available. With such information gaps, however, subjective opinions become an overly strong factor in individual assessments of programs.

Two areas are deserving of further exploration. First, a development that will have a major impact on vocational education for the handicapped is the growing number of suits brought against states by groups supporting the handicapped and demanding that the handicapped be granted basic educational opportunities not now universally available to them. This pressure has already resulted in "Universal Education" legislation in several states, and the trend is almost certain to continue. While the impact of such legislation is not yet clear, it is very likely to have a profound and long-term effect on vocational education for the handicapped.

Right-to-education suits, universal education legislation and the Part B set-aside program have contributed to rising expectations similar to those experienced during the civil rights movement of the last decade. For example, in one state a program established under the Part B set-aside was discontinued for a variety of reasons. A group of parents brought suit against the state department of education to either have the program reinstated or to create an even more comprehensive program for the handicapped. The suit is likely to cause the passage of a universal education law in that state.

Some states have been accused of racial and ethnic bias in their classification procedures. Two responses by states to this pressure are: (1) the establishment of a classification procedure that includes the participation of parents in the classification of individuals and the institution of an appeals procedures; and (2) the elimination of categorical classification altogether in favor of a "special needs" label. In the latter case, "special needs" students would be worked with at the local level on an individual basis, although programming would remain similar to that which currently exists. What will change, though, would be the identification of the student for state and federal records. Apparently, such individuals would be identified as "special needs" students. No breakdown of disadvantaged or handicapped or type of handicap would be made on the record. Obviously, this could create some problems in the administration of set-aside funds.

The whole question of the impact of legislation and litigation on vocational education for the handicapped will be discussed further in the project level assessment.

63/64

Part II

PROJECT LEVEL ASSESSMENT

PROJECT LEVEL ASSESSMENT

Part I summarized the strengths and weaknesses of state administration of the Part B set-aside program for the handicapped. Part II looks at the program from the local or "project" level point of view. On-site assessments were made at 92 vocational education projects for the handicapped, funded either in part or in total by Part B set-aside funds. As was stated in the introduction, 74 of the projects were in nineteen states and constituted a representative sample of all projects funded in the nineteen states. The remaining eighteen projects were in four rural states (one each in Washington, Idaho, Wyoming, and Kansas) and fourteen in California (the state with the largest enrollment of handicapped students under the Part B set-aside program).

The purpose of the project level assessment was to examine the various ways local administrators identified handicapped individuals who qualified for the program, screening techniques, assessment techniques, counseling, instructional methods, and overall approaches to the provision of vocational education to the handicapped. In addition, the perceptions of local school officials, project administrators, counselors, and instructors were obtained regarding local-state relationships, the adequacy of curricula, special equipment and materials, employer participation, and personnel, and the identification of additional resources -- over and above those applied to the regular vocational education program -- contributed at the local level to the handicapped program. Finally, outcomes data (when available), together with financial and enrollment data, were collected at the local level.

Definition of a Project

Part B set-aside funds are allocated to state departments of education which in turn reallocate them to local education agencies or directly to local schools. Eventually, all such funds, except those that are used for administrative purposes at the federal, state, and local levels, are channeled into specific "projects" carried out by schools. A project is a Part B set-aside grant to a school or local education agency for the purpose of providing *specific educational services* to the handicapped. Block grants to local education agencies for nonspecified services are not considered "projects," although such grants are eventually translated into projects at the local education agency level. Projects, designed to serve a stated number of handicapped students, have identifying "project numbers" and time periods generally equal to those of the school year; e.g., September 1963 to June 1964. Projects break down into the following categories:

1. *Regular:* Handicapped students are placed in regular vocational education classes with non-handicapped students. Extra support is provided to the instructors of such classes. Such support may take the form of the assignment of special personnel to regular classes in which handicapped students are enrolled, or the purchase of special equipment and materials for use by handicapped students.
2. *Special:* Handicapped students are placed in separate vocational education classes. These classes may be full time or part time. For example, some handicapped students may spend two hours a day in the "special" class and the rest of their time in regular classes; others may spend all their school hours in special classes.

3. Combination: Handicapped students are placed in special classes for part of their time in the project and regular classes for the remainder. However, unlike part-time special classes (in which the students receive special services only when they are in the special class), in combination projects, the students receive services when they are in both the special and regular components of the projects. An example of a combination project would be one in which handicapped students spend from four to six weeks in a special assessment, orientation, or prevocational class, after which they are referred to one or more of the school's regular classes, including cooperative education and work experience courses. After the students have been placed in regular classes, they are nevertheless considered to be enrolled in the original "handicapped project." Thus separate student progress and fiscal records are kept. The fiscal records relate to supportive services provided to handicapped students while they are enrolled in the regular classes.

4. Other: States may fund colleges, universities, local education agencies, or private organizations to provide training for personnel who work with the handicapped and/or to develop curriculum materials; or the funds may be used to provide such services in house (by state education agencies, local education agencies, or schools).

Only the first three types of projects were considered in selecting the project level sample; personnel training and curriculum development projects were not included. Thus the sample of 92 projects consists solely of projects that provided assessment, orientation, prevocational training, vocational training, supportive services, or any combination of these, directly to handicapped students.

The original sampling design called for the stratification of projects by type of instruction (classroom and/or laboratory training, work experience and cooperative education), type of class (regular, special, or combination), and type of handicap (mental or physical and sensory). However, this stratification scheme had to be abandoned because of lack of information regarding the three stratification categories available at the state level. The 74 representative projects were selected randomly, with the number of projects per state based on each state's proportional contribution to total enrollment in the nineteen states included in the representative sample. A purposive sumple of eighteen projects was selected from lists of projects in the four low enrollment states and California.

The statistical tables contained in the project level assessment pertain solely to the representative sample. Projects contained in the special sample are referred to in the text, but because they do not lend themselves to statistical analysis, data relating to these projects have not been included in the statistical tables.

Organization of Part II

The project level assessment examines the Part B set-aside program for the handicapped from the "firing line," or from the point where educational services are actually delivered to the handicapped. State level administrators may set policies and procedures through which projects are funded, but it is at the local level that the handicapped are identified, classified, referred into projects, and provided with vocational instruction or other services. Moreover, the state level assessment revealed that policy and planning regarding vocational education for the handicapped, and even project monitoring and evaluation, are often left up to local administrators. To answer some of the basic questions asked by the Office of Education in its Request for Proposal (RFP), data generally not available at the state level had to be sought at the local level. For example, one of the objectives of the study was to determine the extent to which handicapped students are integrated with regular students, and whether work experience situations are made available to the handicapped. Neither national nor state data provided clear answers to these questions. The answers had to be sought at the local level.

The fulfillment of three of the major objectives of the study -- to provide useful information on the relationships between post-program performance and the kinds of experience that handicapped students receive, to identify and analyze constraints in carrying out vocational education programs for the handicapped, and to determined whether or not Part B set-aside funds are actually reaching the handicapped -- depended to a great extent on the availability of local data and the opinions of local administrators.

The material that follows is a synthesis of information emanating from on-site visits to 92 projects in 24 states. In the section which follows, a statistical overview of the representative sample is provided, including an analysis of the strengths and weaknesses of local management information systems. Other sections include (in order): policy and planning at the local level, project administration, and the instructional program. Where pertinent, the material detailed in Part III of the report is used to support some of the conclusions of the project level assessment.

Statistical Overview

The search for statistical data at the local level was more successful than the state level search, but even at the local level, data considered crucial to the assessment were not readily available. Researchers were forced to review enrollment and fiscal records, student rosters, and other information sources in the attempt to collect and tabulate such data as:

(1) Enrollment by handicapping condition

(2) Enrollment by sex

(3) Enrollment by race and ethnic background

(4) Enrollment by occupational offering

(5) Fiscal information, including local contributions

(6) Outcomes information, including completers, placements, and follow-up data

The search was not always successful, partly because of time pressures and partly because all of the information sought was not available at any site. The data search was complicated by categorization problems, the ambiguity of some of the terms used to describe handicapping conditions, and the fact that data collected from various informational sources often were in disagreement with each other.

Data Collection Problems

Monitoring and evaluation depend to a great extent upon the collection and tabulation of "hard" statistical data. They also depend upon the presentation of such data in a form that is readily understandable to program administrators. Adequate management information systems were extremely rare at the local level. In many cases, the necessary information was "buried" in files, but it was seldom that such information was processed for management purposes. In addition, definitions for such terms as "handicapping condition" and "completer" varied from area to area and local administrators often were not aware of the sources (federal, state, and local) from which project funds were obtained. Very little attempt was made to document placement and follow-up information, although in many sites, the project directors and/or instructors knew whether students were placed and/or were still on the job. Because of their pertinence to the statistical overview which follows, and because of the insights they provide regarding local monitoring and evaluation efforts, some of the major problems pertaining to local management information systems are described below.

Categorization Problems

It was often difficult to determine whether a project should be categorized as a "work experience" or "classroom/laboratory" project. This was particularly true when students enrolled in the same project were placed in many different "regular" classes, some which were "work experience" and some which were nonwork experience. It was ultimately decided that unless the major focus of the project was work experience and the vast majority or all of the students were placed in work experience situations, the project would be classified as "classroom/lab." However, the question was also asked whether students enrolled in the projects received compensation. The answer to this question provided statistical information on the number of projects in which some students, if not all, received compensation for work experience.

A similar problem arose in attempting to categorize projects as "regular," "special," or "combination." A single project, for example, might fund three classes in one or more schools, one of which might be special, one regular, and one combination, thus causing the project to fall into all three classifications. In the nine instances where projects included more than one "type of class" category, the projects were classified separately.

Ambiguity of Terms Used to Describe Handicapping Condition

The threat of class action suits against states and local education agencies or the results of such suits in some states and local areas, especially those that have charged that the schools have wrongfully labeled students as "mentally retarded" or "seriously emotionally disturbed," have caused a trend in some states and areas to cease categorizing students by type of handicap or to use ambiguous terms to describe handicapping conditions. The trend in one state, for example, was to classify the handicapped under the term "learning disability." In some areas, the term "socially maladjusted" was used to classify some handicapped students, and in at least two states, the term "educationally handicapped" was used. Other states used the term "special needs" to cover all handicapped students.

Clear definitions of these terms either were not forthcoming from project administrators and/or special education personnel, or if definitions did exist, they were of little use in pinpointing handicapping conditions. For example, in one area, the term "educationally handicapped" was defined as follows: "Persons who have normal ability or potential, but due to behavior or academic skill are functioning below expectancy. These persons can function well where limited academic skills are required" (emphasis added).

This definition could be applied to a large proportion of all students attending public schools, students who are not normally considered "handicapped" -- at least as handicapped is defined in the 1968 Amendments to the Vocational Education Act.

Because of these problems, enrollment of students by handicapping condition could not be determined for approximately 20 percent of the projects. When statistical information on enrollment by handicapping condition was presented, the term "socially maladjusted" was combined with "seriously emotionally disturbed," "educationally handicapped" was listed as a separate category, and where the term "special needs" was used, the handicapping condition was listed as "unknown."

Enrollment Information

The basic source for enrollment information was the proposal submitted by the school or local education agency to the state. Figures on "planned" versus "actual" enrollment

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were virtually nonexistent at the local level (as they were at the state level). However, the project proposal merely provided total enrollment figures. To obtain breakdowns by handicapping condition, racial and ethnic characteristics, and sex, it was often necessary for project personnel to go through the student rosters and describe the characteristics of each student. (Of course, the names of the students were not provided.) In cases where project officers did not know the handicapping conditions or racial and ethnic characteristics of students, estimates were obtained. The problem was that very often total enrollment figures acquired through examination of student rosters did not agree with those obtained from project proposals. The same was true when attempting to break down enrollment by occupational offering. The total of the names listed under the various occupational offerings was often different from those obtained from both the student rosters and the project proposals.

Unfortunately, there was no way of bringing these diverse sources of enrollment information into agreement. The result was that different enrollment figures had to be used in presenting different types of statistical data.

Fiscal Information

The project proposal was also the major source for fiscal data, but as with enrollment data, figures on "planned" and "actual" expenditures did not exist. In addition, the following problems were encountered in collecting fiscal data:

1. Project personnel often could not identify "federal" or "Part B" funds. At the local level, such funds were generally called "state" funds. With respect to projects that receive funds directly from the states, this was not too much of a problem, since the "state" funds were in actuality "federal" funds.

However, in states which fund local education agencies rather than projects (California, for example), or where schools are reimbursed by the state on the basis of the number of credit hours handicapped students are enrolled in regular classes (Illinois), it was often impossible to identify federal funds used to finance projects, or the services that were purchased with federal funds.

2. Local administrators were often vague regarding local and state funds used to purchase services for the handicapped -- over and above those that are normally available to all students. It should be emphasized, however, that in virtually no case did local administrators exaggerate local contributions; in fact, the opposite was true in most areas. For example, in many areas such items as travel costs were paid for by local funds but note of this contribution was not made on the project budget.

Outcomes Data

The weakest information available at the local level was data relating to completions, placements, and follow-up. For example, what little outcomes information existed was not broken down by specific occupational offering; in fact, it was often not possible to *identify* specific occupational offerings. The major problem, however, was that outcomes information either was not collected or, if it was collected, was not processed in a way that would be useful for monitoring and evaluation purposes. The attempt was made to collect the following kinds of outcomes information:

(1) Number enrolled

(2) Number of dropouts

(3) Number of completers

(4) Number employed

(5) Number employed (training related)

(6) Number employed (nontraining related)

(7) Number unemployed

(8) Number reenrolled in project

(9) Number enrolled in regular vocational education program

(10) Number enrolled in other training

(11) Number unknown

At only twenty of the 74 projects included in the representative sample was all of the above information available. For the remainder of the projects, the outcomes information was so sparse as to be virtually useless. Per enrollee and per completer costs could be computed for only 25 projects.

Summary

It is clear that problems pertaining to the accuracy and completeness of national and state data on the Part B set-aside for the handicapped originate at the local level, and that they do not lend themselves to easy solution. The diverse methods used for funding projects, the lack of use of common definitions for key terms and handicapping conditions, and most important of all, the apparent lack of response and lack of resources at all levels to meet the need for monitoring and evaluation combine to create a management information system that is at best incomplete and at worst nonexistent. It will take action at the federal level to improve the overall system, but it is doubtful that such action will be fruitful unless state and local administrators are consulted before improvements are instituted. The goal should be to aid local administrators in generating the kinds of information they need to maintain control over their programs. If the requirements of local administrators are satisfied, and if local administrators understand the need for collecting complete and accurate data on their programs, it follows that state and national requirements will also be met.

Overview

The statistical presentation contained in this section pertains to the representative sample of 74 projects in nineteen states. It addresses itself to several key issues regarding programming for the handicapped, including the extent to which the handicapped are placed in classes with regular students ("mainstreaming") and the extent to which work experience situations are made available to handicapped students. Analyses are also made of enrollments by type of handicap, sex, and racial and ethnic background. Data pertaining to project costs are contained in the section "Project Administration," and those pertaining to occupational offerings, institutional settings and outcomes are contained in the "Instructional Program" section.

Analysis of Projects Included in the Representative Sample

Before the statistical findings are presented, it is necessary to describe the types of projects included in the representative sample. Separate analyses were made for each type. The first, consisting of 61 "traditional" projects, was made up of specific courses of study for class-size groups of handicapped individuals. The second group of thirteen projects, called the "unique" group, was made up of the following:

(1) Mobile laboratories, or diagnostic centers, which often service as many as a thousand students during the school year

(2) The funding of special school districts, made up solely of handicapped individuals, which also serviced large numbers of students during the year

(3) Special summer programs, generally of a work experience nature, which provided jobs or other services for a large number of handicapped students during the summer months

Statistical data pertaining to these two groups of projects are presented separately. It is obvious that if the two were combined, the resulting data would not make sense. Enrollments in the "unique" projects were large; enrollments in the "traditional" projects were class-size (although more than one course, or several classes, was often offered by the traditional projects). The nature of the services provided by the two groups was also different. The services provided by the traditional group were primarily educational in nature; the services provided by the unique group were primarily diagnostic and supportive.

Mainstreaming

"Mainstreaming" is the term used to describe the integration of handicapped students in regular vocational education classes. Table II.1 provides information on the extent to which students enrolled in the Part B set-aside program were placed in "regular" rather than "special" classes. As was mentioned previously, in nine of the 61 traditional projects included in the representative sample, more than one type of class was funded. Because it was not possible to obtain enrollments by type of class for these nine projects, they are categorized separately in Table II.1 ("more than one category"). It is known, however, that in eight of the nine projects, some students were placed in special and combination classes, and in six, some were placed in regular classes.

Table II.1 shows that 62 percent of the projects, representing 51 percent of the enrollment, were in special classes. As all of the thirteen unique projects were special, this means that in 69 percent of the 74 projects included in the representative sample, handicapped students were not integrated into regular classes. When it is also considered that a substantial portion of the students in the "more than one category" classification were enrolled in special classes, it must be concluded that the goal of integrating handicapped students with regular students is still far from a reality.

Table II.1

Projects and Enrollment by Type of Class -- Representative
Sample of Vocational Education Projects for the
Handicapped in Nineteen States
(61 traditional projects)

Type of Class	Projects		Known Enrollment		Project with Enrollment Unknown	
	Number	Percent	Number	Percent	Number	Percent
Total	61	100%	6,555	100%	8	13%
Special	38	62	3,349	51	4	10
Regular	6	10	750	11	2	33
Combination	8	13	890	14	2	25
More than one category	9	15	1,566	24	0	00

Work Experience

The extent to which handicapped students are enrolled in work experience programs is reflected in Table II.2. Of the 61 representative projects, nineteen (or 31 percent) were categorized as either work experience (18 projects) or cooperative education (one project). These projects accounted for 28 percent of the total known enrollment in the 61 projects. Only one of the thirteen unique projects was categorized as work experience.

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Therefore, of the 74 projects in the representative sample, twenty (or 27 percent) were work experience, or in the case of one project -- cooperative, in nature.

Table II.2

Projects and Enrollments by Type of Project -- Representative Sample of Vocational Education Projects for the Handicapped in Nineteen States (61 traditional projects)

Type of Project	Projects		Known Enrollment		Project with Enrollment Unknown	
	Number	Percent	Number	Percent	Number	Percent
Classroom/lab	42	69%	5,100	72%	1	2%
Work experience	18	30	1,898	26	6	33
Cooperative	1	1	73	02	0	00

Table II.3 shows the number of projects in which some but not all of the students received compensation for work performed in work experience components. In nearly half of the projects, including the nineteen listed above, compensation was paid to some students. It was impossible to determine the exact number of students who were receiving compensation, but in most projects that were not genuine work experience or cooperative projects, the number was comparatively small (generally less than five).

Table II.3

Number and Percent of Projects in Which Some Students Are Receiving Compensation -- Representative Sample of Vocational Education Projects in Nineteen States (61 traditional projects)

Compensation	Number	Percent
Yes	30	49%
No	31	51

Enrollment by Handicapping Condition

National projections on the incidence of handicapping condition for schoolchildren between the ages of five and nineteen (1968-69)[1] revealed that of the approximately 6.057 million handicapped children, 88 percent were classified in one of the following categories: speech impaired (35 percent), mentally retarded (23 percent), emotionally disturbed (20 percent), and learning disabled (10 percent). Six percent were classified as hard of hearing or deaf, 5 percent as crippled and other health impaired, 1 percent as visually impaired, and 1 percent as multihandicapped.

Table II.4 shows enrollment by handicapping condition in the 61 traditional projects, and Table II.5 provides the same information for the thirteen unique projects. The differences between enrollment by handicapping condition in Part B set-aside projects and national incidence figures were quite dramatic. Of the known enrollment in the 61 traditional projects, 79 percent were mentally retarded; the corresponding figure for the thirteen unique projects was 76 percent. National incidence figures showed 23 percent mentally retarded.

However, if the category "speech impaired" was eliminated from the incidence figures, the gap would be narrowed considerably. Not counting youngsters with speech impediments, the national incidence figures for 1968-69 showed that 89 percent of the children were in the following categories: mentally retarded (35 percent), emotionally disturbed (31 percent), and learning disabled (15 percent). These three categories accounted for 84 percent of the known enrollment in the 61 traditional projects and 79 percent in the unique projects. Since many (perhaps most) speech-impaired students can succeed in vocational

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[1] Bureau of Education for the Handicapped, U.S. Office of Education, Handicapped Children in the United States and Special Education Personnel Required 1968-1969 (est.).

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education programs without "special education assistance" (only a few speech-impaired students were reported as enrolled in the 92 sample projects), for comparison purposes, it appeared to be legitimate to eliminate the speech-impaired category from the national incidence figures. When this was done, the differences between enrollment by handicapping condition in the representative sample and national incidence figures became less marked, although the incidence of mental retardation in the set-aside programs was much higher than in the national figures.

Table II.4

Number and Percent of Known Enrollment by Handicapping Condition -- Representative Sample of Vocational Education Projects in Nineteen States (61 traditional projects)

Handicapping Condition	Enrollment	Percent of Total
Total	7,071	100%
Unknown	2,360	33
Total known	4,711	100
Mentally handicapped:	3,974	84
Educable Mentally Retarded	3,089	66
Trainable Mentally Retarded	575	12
Learning disability	181	04
Seriously Emotionally Disturbed	19	01
Educationally handicapped	50	01
Physically handicapped	697	15
Multihandicapped	40	01

Table II.5

Number and Percent of Known Enrollment by Handicapping Condition -- Representative Sample of Vocational Education Projects for the Handicapped in Nineteen States (Thirteen unique projects)

Handicapping Condition	Enrollment	Percent of Total
Total	7,829	100%
Unknown	3,739	48
Total known	4,090	100
Mentally handicapped	3,180	78
Educable Mentally Retarded	2,756	67
Trainable Mentally Retarded	361	09
Learning disability	84	02
Seriously emotionally disturbed	39	01
Educationally handicapped	19	.5
Physically handicapped	838	20

Enrollment by Sex and Racial and Ethnic Background

Table II.6 shows known enrollment by sex and racial and ethnic background for the 61 traditional projects, and Table II.7 provides the same figures for the thirteen unique projects (it should be noted that for 56 percent of the enrollment in the unique projects, racial and ethnic figures were not available; and for 66 percent, the breakdown by sex was not available).

Of the known enrollment in the traditional projects, 55 percent were white, 37 percent black, and 8 percent Spanish-surnamed, Oriental, and other; the corresponding figures for the unique projects were 48 percent (white), 45 percent (black), and 7 percent (Spanish-surnamed, Oriental, and other).

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Enrollment by sex was approximately 60 percent male and 40 percent female, although in the unique projects, the known enrollment was 68 percent male and 32 percent female.

Table II.6

Number and Percent of Enrollment by Sex and Racial and Ethnic Background -- Representative Sample of Vocational Education Projects for the Handicapped in Nineteen States (61 traditional projects)

Characteristics	Number Enrolled	Percent of Enrollment
Total by sex	7,416	100%
Unknown	1,579	21
Total known	5,837	100
Male	3,566	61
Female	2,271	39
Total by racial and ethnic	7,486	100
Unknown	1,911	26
Total known	5,575	100
White	3,071	55
Black	2,086	37
Spanish-surnamed	311	06
Oriental	9	-
Other	26	01
American Indian	73	01

Table II.7

Number and Percent of Enrollment by Sex and Racial and Ethnic Background -- Representative Sample of Vocational Education Projects for the Handicapped in Nineteen States (Thirteen unique projects)

Characteristics	Number Enrolled	Percent of Enrollment
Total by sex	7,829	100
Unknown	5,151	66
Total known	2,678	100
Male	1,822	68
Female	856	32
Total racial and ethnic	7,829	100
Unknown	4,373	56
Total known	3,456	100
White	1,646	48
Black	1,558	45
Spanish-surnamed	39	01
American Indian	12	--
Oriental	1	--
Other	200	06

Summary

The major findings of the statistical overview are:

1. Most of the programming under the Part B set-aside was for special rather than regular or combination projects. This means that the goal of integrating handicapped students into regular vocational education classes is still merely a goal -- not a reality.

2. Approximately 30 percent of the projects in Part B set-aside programs were in some form of work experience program, and in nearly half of the projects, at least a few students were placed in work experience components. Considering

the handicapping conditions of the students, this is a surprisingly good record. Most of the jobs held by students in such programs had little relationship to the vocational courses provided by the school; the jobs were used both as a means of income maintenance and as work experience.

3. Enrollment by handicapping condition generally paralleled the incidence of handicapping conditions throughout the nation.

Most of the students were white, but a sizable number were black (between 37 and 48 percent). The high percentage of black students can be partially explained by the high percentage of black enrollment in some of the school districts visited. Few Spanish-surnamed, Oriental, American Indian, and other minorities were enrolled in the program. The breakdown by sex was approximately 60 percent male and 40 percent female.

Policy and Planning

The state level assessment revealed that most state program officers believe that policy and planning for vocational education programs for the handicapped are local responsibilities. Interviews were conducted with project and local education agency administrators at all 92 sites to determine how policy is set (if it is set) and how planning is carried out at the local level.

Policy can be defined as "a definite course or method of action selected from among alternatives and in the light of given conditions to guide and determine present and future decisions." Planning is the process through which potential target populations are identified and priorities (based on available resources) are set; and programs initiated are evaluated to determine their effectiveness.

The Vocational Education Act of 1963 established a national policy regarding vocational education for the handicapped, for it contained a general charge to the states that a portion of the grants they receive from the federal government be used to provide vocational education opportunities for the handicapped. However, it wasn't until the 1968 amendments established the Part B set-aside that such programming actually became a reality. Thus in a sense it can be said that the 1968 amendments imposed on vocational educators from the national to the local levels a policy regarding the handicapped.

The 1968 amendments also required states to prepare and submit "state plans," theoretically based on the needs of local education agencies throughout the various states. The extent of local education agency planning, and the methods used to draft local plans, were explored in the project level assessment.

Policy at the Local Level

Policy as defined earlier in this section can emerge from within the local education agency or state department of education, or it can be mandated by legislative or judicial fiat. There can be no doubt that with respect to educational services for the handicapped, policy has been imposed from without. Administrators in only fourteen of the 92 local areas visited in conjunction with the project level assessment said that vocational programming existed for the handicapped prior to the 1968 amendments, but even in these areas, the pre-1968 programs were small compared to what they are today. In only a few areas have local school boards enunciated policies of their own toward the handicapped, and in some instances, these have been negative (examples of both positive and negative policies will be described later in this section).

There is also evidence that the Part B set-aside and other federal legislation dealing with educational services for the handicapped, along with class action suits and universal education legislation, have helped increase public awareness of the problems faced by the handicapped in acquiring educational services. All states and all local school districts visited during the course of this study were aware of these developments, whether or not they had been the subjects of such suits or legislation. Because of their importance to the development of policy at the local level, some of the more significant legislation recently passed by states, and class action suits brought against educational agencies in behalf of the handicapped, are summarized in this section.

Legislation[2]

Virtually all states have in force some type of mandatory legislation requiring that at least a portion of their handicapped children be provided an education. Too frequently, however, these mandatory requirements have been ignored, and in almost all states many handicapped children in need of special education programs have been unable to obtain them. Examination of this situation a few years ago suggested that the presence of mandatory legislation had little effect on the expansion of educational opportunities for handicapped children.

The new laws, however, are different, primarily because many of them contain basic policy mandating the education of all handicapped children. For example, the North Carolina legislature passed a law containing the following language: "The General Assembly of North Carolina hereby declares that the policy of the state is to ensure every child a fair and full opportunity to reach his full potential and that no child as defined in this Act shall be excluded from services or education for any reason whatsoever." In another section of the law, the language is even more specific by requiring that the state "shall prevent denial of equal education and service opportunity on the basis of national origin, sex, economic status, race, religion, and physical, mental, social, or emotional handicap in the provision of services to any child" (emphasis added).

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[2] Olympus Research Corporation is indebted to Alan Abeson, director of the State-Federal Clearinghouse for Exceptional Children, Council for Exceptional Children, for the material appearing in this and the succeeding subsection.

Some states are requiring dates by which compliance must be achieved. In Kansas, for example, a recent law requires that "the board of education of every school district shall provide special education services for all exceptional children in the school district . . . not later than July 1, 1969." A similar but more dramatic statute, passed by the West Virginia legislature in March 1974, calls for the education of all exceptional children between the ages of five and 23 beginning July 1, 1974. Presently, of the nineteen states with specific statutory dates of compliance, seven become effective in 1974, one in 1975, four in 1976, four in 1977, and two in 1979.

Another important element of emerging law is the incorporation of many of the legal principles that have been established through right-to-education and associated litigation. Perhaps the most significant of these elements is provisions requiring that any alteration of a child's educational status must be governed by adequate due process protections.

Still another observable trend in recent legislation is emphasis upon the placement of handicapped children in educational programs which are as close to the normal situation as possible, yet in which they can effectively learn. The Wisconsin school code requires that "preference is to be given, whenever appropriate, to education of the child in classes along with children who do not have exceptional educational needs." Florida law specifies that in providing for the education of exceptional students, the superintendent, principals, and teachers shall use the regular school facilities and adapt them to the needs of exceptional whenever this is possible. The Florida law also specifies that no student shall be segregated and taught apart from normal students until a careful study of the student's case has been made and evidence obtained which indicates that segregation would be for the student's benefit, or is necessary because of difficulties involved in teaching the student in a regular class.

These laws have been accompanied by increased appropriations for the education of the handicapped. A recent survey of nearly half of the states indicated that between the 1971-72 and 1973-74 school years, increases in appropriations ranged from 15 percent (Maine) to 377 percent (West Virginia). West Virginia's huge percentage increase meant a $2.7 million appropriation for 1973-74, up from $564,268 in 1971. In the same period, Arkansas went from $450,000 to $2 million, a 344 percent increase. The average increase was about 60 percent.[3]

Along with expanded appropriations has come inclusion in state laws of financial penalties for failure to implement the states' mandates. In Maine, a law has been adopted which provides that if after the compliance date of July 1, 1975, all eligible exceptional children have not been provided "the necessary education" by the appropriate administrative unit, the state commissioner of education "may withhold all or such portion of the state aid" as in his judgment is warranted. Similar laws have been enacted in Missouri and Colorado.

One final area that has recently received state legislature attention in special education statutes, and which may signal a trend, is the training of regular education personnel. As is well recognized, the ultimate success of educational programs for the handicapped is in large measure dependent upon the attitudes of regular educators, teachers, administrators, and policy makers. What negative attitudes they may hold must be altered, and they must be made aware of the educational needs of all handicapped children, regardless of whether these children are in regular classes or special programs. In Colorado, in-service training of regular classroom teachers to provide special education services within regular classrooms is included as a "state reimbursable" expenditure. A recent law passed by the Georgia legislature requires that after July 1976, no certificates may be awarded to teachers, principals, or guidance counselors unless each candidate has successfully completed a course of five or more quarter-hours in the education of exceptional children, or has participated in local education agency staff development programs designed to assist teachers in identifying children with special needs.

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[3] Education Commission of the States, States with Comprehensive Legislation and Educational Services for Handicapped Children, 1974.

Litigation

The following quotations from decisions of the Supreme Court of North Dakota (1974), the New York State Commissioner of Education (1973), and the Circuit Court for Baltimore County (1974) testify to the continuing success of the judicial effort to achieve the right to education for all handicapped children:

> We hold that G. H. is entitled to an equal education opportunity under the Constitution of North Dakota, and that depriving her of that opportunity would be unconstitutional denial of equal protection under the federal and state constitutions and of the due process and privileges and immunities clauses of the North Dakota Constitution (in the Interest of G. H., A Child vs G. H., B. H., F. H., Williston School District No. 1, et al., 1974).

I find that a class appeal is properly brought in this matter, in that there are admittedly numerous children residing within the respondent district whose educational needs are not being adequately served, as required by Section 4404 of the Education Law (Reid vs Board of Education of the City of New York, 1973).

The Court declares that it is the established policy of the State of Maryland to provide a free education to all persons between the ages of five and twenty years, and this includes children with handicaps, and particularly mentally retarded children, regardless of how severely and profoundly retarded they may be (Maryland Association for Retarded Children et al., vs State of Maryland, et al., 1974).

To date, 36 right-to-education lawsuits have been filed and are pending or have been concluded in 25 states. Of the seventeen that have been concluded, sixteen have been decided in favor of the plaintiffs (handicapped children or their representatives).

Local Education Agency Policy

In the light of all this legislative activity and litigation in behalf of the handicapped, local education agencies in all but a few of the 92 areas visited were far more aware of their responsibilities toward the provision of education for handicapped children than they had been in the past. However, in most areas, local education agencies were reacting to what they considered "still another demand" put upon the nation's schools rather than in translating these legislative and judicial mandates into a body of local level administrative policy. Although this study was concerned solely with vocational education for handicapped students at the secondary level, the attempt was nevertheless made to determine whether local school boards and superintendents of education issued policy directives dealing with the identification of the universe of need and the various kinds of resources earmarked for the handicapped coming into the local school districts. In most areas, one looked in vain for policy issuances that directed the various educational divisions (special education, vocational education, research units, for example) to work together in creating a comprehensive program for the handicapped.

A recent Rand Corporation report to the Department of Health, Education and Welfare recommended that although expanded educational services for the handicapped are "greatly needed," other federal services should have priority over education in future federal spending. The system, Rand reported, "defies efficient and effective operations; inequities and gaps in service delivery abound, and not enough information is available to manage the service system effectively."[4]

One of the problems appears to be the fragmentation of educational agencies into special units, each with its own private line to funding sources at the state and federal levels. National vocational education administrators talk to state vocational education administrators, who in turn talk to their local counterparts. The same is true with special education, research divisions, and other units. It is seldom that all of these competing units get together to plan a program for the handicapped. The result is that vocational education programs for the handicapped are funded on an ad hoc basis, without policy and planning guidelines to aid those charged with initiating the projects. While there can be no doubt that the resulting projects have been of benefit to the handicapped, most local education agencies have no way of knowing how many of their handicapped students are being served and the adequacy of the program mix.

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[4] Rand Corporation, Improving Services to Handicapped Children, report to the Department of Health, Education and Welfare, Contract No. HEW-OS-72-101.

Exceptions

In ten of the 92 school districts visited, it was apparent that local school boards, superintendents, and special education and vocational education administrators had moved from ad hoc reaction to outside developments to the establishment of comprehensive programs for the handicapped, based on written policy and a coordinated approach to planning. On the other hand, at least four school districts (there may have been more; it was impossible in most areas to obtain the kinds of documentation used in describing the two negative examples below), were operating as if there had been no class action suits in behalf of the handicapped or no passage of legislation requiring the education of all students, handicapped and non-handicapped.

For example, in one state, three local education agency administrators stated that schools have the right to refuse to accept students who exhibit severe emotional handicaps, regardless of age. When questioned further, they agreed that state law requires that all children have the right to an education but that there could be extenuating circumstances, and that these were covered by other state and/or district policies. These policies, the respondents stated, allow the district to remove students from schools before they reach the age of sixteen if they are incapable of socializing; have severe antisocial attitudes; are felt to be dangerous to themselves, other students, or faculty members; or if programs do not exist by means of which behavioral and attitudinal problems can be modified. Further queries indicated that these students, or ex-students, are lost to the education system after their removal from schools. No effort is made to follow up or reenroll the "rejects."

The embattled director of special education of a school district located in a progressive midwestern state -- acting on his own, without support from the school board or his superintendent -- sent the following memo to the principal and assistant principal of the senior high school, the director of vocational education, the director of the guidance department, and the dean of girls (a copy was sent to the superintendent):

> This is to inform you that considerable difficulty has been encountered regarding the enrollment of sufficient number of students in the special needs program. As a consequence, it may become necessary to cancel the funding for the special needs program at the state level . . . . If such action becomes necessary, the [school district] will be in violation of certain provisions of the state code. I therefore wish to discuss certain identification and enrollment problems with you on [date and time].

The author of the memo, who was new in his job, was appalled at the indifference of his co-administrators to the needs of the handicapped. The Part B project in this area had only one student enrolled. There was no attempt on the part of the guidance department to identify students with special needs, and mentally retarded and socially maladjusted children were rejected by the city's one high school.

On a more positive note -- in one of the areas visited, a special school district, with taxing authority, was created to accommodate all handicapped children who could not be served adequately by existing schools; and in another, five school districts combined to establish a policy reeducation of the handicapped and to construct a special school to help carry out this policy. Although the creation of a special school district and school may at first appear to run counter to the generally accepted goal of integrating handicapped students with their "normal" counterpart, both examples are nevertheless obvious manifestations of policy making at the local level. Moreover, in both of the examples described below, students attending regular schools are also served (part time), and students enrolled in the special school districts and school may be referred to regular schools at some point in their training.

St. Louis County (Missouri). In December 1957, the voters of St. Louis County, after thorough public discussion, created a new school district. The district is different from other school districts in that it covers all of the area of St. Louis County and is imposed over the county's other 25 school districts. It is unique in that it is responsible for developing programs of special education and vocational and technical education. It is the only school district in Missouri having the responsibility for providing a program for trainable mentally retarded children.

During its first year of operation, the district provided services for handicapped children by entering into cooperative agreements with other local school districts and deferring payments to these districts until the first taxes levied by the special school district were collected. The district completed its first building in 1961 and is now operating eight buildings.

The vocational and technical programs are designed to prepare students for initial employment in business, trade, and technical occupations while at the same time meeting all of the requirements for a high school diploma, thus making it possible for students to do further work in a college or university. The district offers 24, full-day training programs in eighteen different business, trade, and technical areas.

Manitowac County (Wisconsin). In 1967 (the boards of education of) Manitowac County's five school districts passed resolutions requesting the county board of supervisors to construct a central facility to provide educational services for mentally handicapped children. Children are enrolled in the school upon the recommendation of a multidisciplinary team which has completed a thorough psychoeducational evaluation. An educational plan is developed by the team for each youngster before the child is enrolled. This educational plan is continuously evaluated and revised if necessary.

The statement of policy developed by the five school districts is of special interest. Immediate and long-range goals are listed under a general philosophy of education which states in part: "Mentally handicapped individuals, like their more able peers, are an integral part of society and therefore their education should discover and develop those abilities which will ensure their worthy contribution and membership in that society." Among the specific goals are the following:

(1) To initiate, improve, and expand instructional programs for handicapped students

(2) To establish or otherwise encourage the development of career oriented instruction

(3) To develop programs of staff development

(4) To establish cooperation among public and private agencies concerned with the welfare of the handicapped

(5) To establish work experience projects for the handicapped

(6) To refer students to regular schools (to the extent possible) for part of their skill development

(7) To provide job placement services for the students

(8) To evaluate and follow up on students after their exit from the program

The on-site review indicated that these goals were being carried out successfully. Manitowac County's experience is not uncommon in Wisconsin; all eighteen vocational educational districts have adopted similar policies.

There were other examples of policy in action at the local level, but none in which the policy statements were as carefully articulated as those described above. The Paterson, New Jersey, program concentrated on servicing the handicapped in regular schools and in creating work experience situations for the handicapped. Michigan school districts, partially but not solely due to prodding by the state, were especially successful in integrating the handicapped in regular classes -- especially in regional vocational centers. Some Florida school districts had carefully articulated programs for the handicapped, and other school districts experimented with diagnostic centers (mobile and stationary).

These programs, however, were exceptions. In the vast majority of the school districts visited, projects were being initiated on an ad hoc basis. Little attention was given to the articulation of clear policy statements concerning educational services for the handicapped.

Issues

Local administrators were asked whether policies existed regarding some of the more important issues pertaining to educational services for the handicapped. Among these were policies regarding "special" versus "regular" classes, the development of work experience components for the handicapped, and the possible effect revenue sharing may have on programming for the handicapped at the local level.

With respect to revenue sharing, half of the administrators interviewed said that revenue sharing would have an adverse effect on programs for the handicapped; seventeen said that it would have no effect; and the remainder (29) said they "didn't know." The consensus of those who said revenue sharing would have a negative effect was that entrenched special interest groups, most of which represent nonminority groups (or the "loudest" minorities), would see to it that funds that would otherwise have gone to the handicapped would be siphoned off for other purposes. One administrator in a rural southern school district called attention to the "courthouse syndrome." He reported that the county had just built a new courthouse, had added a high fence with a gun tower to the jail (located directly across the street from the school), and was paying to maintain the old courthouse as a monument -- all with revenue-sharing funds. In the meantime, school funds had been cut by the county. The administrator said that he tried to point out to the local judge the number of students now enrolled in the Part B project who, if they had followed the example of their predecessors, would have dropped out and possibly ended up in jail -- but with little success.

The general consensus of all administrators interviewed was that work experience components should be initiated for the handicapped, and many school districts were surprisingly successful in promoting work experience situations for their handicapped students. The major constraints mentioned which limited work experience components were: (1) the reluctance of employers to hire severely handicapped individuals, and (2) the limited abilities of some handicapped students. Most of the handicapped students who were enrolled in work experience programs, other than those enrolled in sheltered workshops, were individuals whose appearance did not mark them as "different."

Approximately two-thirds of the local administrators interviewed said that it was the policy of their school districts to integrate the handicapped with regular students.

Twenty reported no policy in this area, and eleven said that they did not know whether such a policy existed. However, in most areas where the policy calls for integration, implementation was still far from a reality. One of the major reasons cited by administrators for the lack of implementation is that it is easier to account for funds spent for "special" classes than it is for funds spent for "regular" classes. "When auditors or evaluators like yourself come around," one administrator said, "it's far easier to explain special programs than it is regular programs, and it's far easier to keep track of the funds." Other reasons cited for the lack of implementation were the reluctance or inability of regular teachers to accept (or teach) handicapped students and the need of some handicapped individuals for special services that are not available in regular classrooms.

Planning

It would be a mistake to say that no planning takes place in the majority of school districts without articulated policies toward the handicapped, but it is accurate to maintain that what planning does take place is of a short-term nature, generally directed at justifying specific projects. The question raised by the project level assessment was: Whose responsibility is it to plan educational programs for the handicapped? It would be unfair to place the blame for the lack of planning solely on vocational administrators or on the administrators of vocational programs. It is the responsibility of vocational education to provide a specific kind of educational service to all who are referred to the vocational education program -- handicapped and non-handicapped; it is not necessarily the responsibility of vocational education to identify, assess, and recruit all students coming up through the education system who should be referred into the vocational education system.

On the other hand, vocational education is responsible for administering the Part B set-aside program. Thus vocational education administrators, from the national to the local levels, are at least partially responsible for planning. Yet if vocational educators were to use Part B set-aside funds to discover the universe of need and assess handicapped students to determine their fitness for occupational training, they would not only be duplicating activities carried out by other divisions of educational agencies (special education and research units, for example), but they would also be reducing the amount of funds available to provide direct educational services to the handicapped.

Thus if long-range plans are to be launched to provide comprehensive educational programs for the handicapped, including vocational education, pertinent divisions of educational agencies -- at both the state and local levels -- must work together. At the very least, special education divisions, vocational education divisions, research units, and information collecting units should work together in planning programs for the handicapped. Ideally, outside agencies, such as vocational rehabilitation, should also be brought into the planning process.

There was very little evidence of this kind of cooperation in most of the areas in which the sample projects were located. When asked about the universe of need or the establishment of priorities, most respondents expressed bewilderment. "Planning," if it can be called that, consisted mainly of getting together with special educators to determine what kind of a project should be funded and what types of students should be referred to the project. The objective was to spend the funds (Part B set-aside) available from the states.

Part of the problem is due to the aforementioned fragmentation of educational responsibilities. It is doubtful that coordinated planning for the handicapped will take place until a policy is set calling for coordination in the planning of all educational programs.

Summary

Prior to the 1968 amendments to the Vocational Education Act of 1963, policy regarding education for the seriously handicapped was not a primary concern of educational policy makers at either the state or local levels. Since the amendments, state and local educational officials have been forced to devote some attention to the handicapped. There is evidence to indicate that the amendments have spurred class action suits against educational agencies in behalf of the handicapped and that these suits, in turn, have resulted in universal education legislation in some states. Because of these developments, overall policy toward providing educational services, including vocational education, to the handicapped appears to be emerging. However, clearly articulated policies and coordinated planning have not yet occurred in most areas, although some areas are far more advanced than others. Nevertheless, it is certain that since the passage of the 1968 amendments, projects have been funded for the handicapped in all states -- projects that did not exist prior to 1968.

Project Administration

The amount of Part B set-aside funds that were allocated to individual projects constituted a miniscule proportion of all funds administered by local education agencies and schools. Perhaps for this reason it was relatively easy for local education agencies and schools to absorb the administrative costs of the Part B program. Certainly as Tables II.8 and II.9 indicate, the vast majority of Part B set-aside funds, expended between school years 1972-73 and 1973-74, were spent for direct services to the handicapped. This was one of the most positive findings of the project level assessment.

This section contains an analysis of the allocation of Part B set-aside funds, by cost category, and an exploration of the administrative techniques employed by local education agencies and schools in conducting the set-aside program. It should be kept in mind that the two preceding sections discussed problems associated with management information systems and planning, both of which are administrative functions. They were treated separately because the issues they raise appeared to warrant special attention.

Allocation of Funds

Data regarding the allocation of funds, by cost category, were collected for both school year 1972-73 (the base year) and school year 1973-74. Data regarding school year 1972-73 were presumably complete, whereas cost figures for school year 1973-74 (which was still in progress at the time of the study) were "anticipated" cost figures. Nevertheless, comparisons between the complete 1972-73 fund allocations and anticipated 1973-74 allocations resulted in highly significant findings.

Table II.8 shows the allocation of funds, by cost category, for the base year 1972-73; the corresponding figures for school year 1973-74 are shown in Table II.9 (all cost allocation figures are for the 61 "traditional" projects included in the representative sample). The term "contact staff" means personnel who work directly with handicapped students; e.g., instructors, counselors, therapists, and so forth. "Noncontact" staff are personnel whose regular work does not bring them into contact with the students; e.g., administrative staff, clerical workers, maintenance personnel, and the like. The term "combined costs" means the total of federal, state, and local funds allocated for the program.

The information contained in the two tables is far from complete. In 1972-73, combined costs were not available for nine projects, or 15 percent of the sample, and federal costs were not available for ten projects, or 17 percent of the sample. In 1973-74, combined and federal costs were not available for nine projects. Of the cost figures

Table II.8

Allocation of Funds by Cost Category -- Representative Sample of Vocational Education Projects for the Handicapped in Nineteen States (61 traditional projects; 1972-73)

Category	Combined	Percent	Federal	Percent of Total	Percent of Federal
Total known	$2,460,552	100%	$1,822,786	74%	100%
Total known (with cost breakdowns	2,395,492	100	1,613,586	67	100
Contact staff	1,835,860	75	1,346,984	73	83
Noncontact staff	111,074	05	84,463	76	05
Facilities	12,989	01	7,868	61	01
Equipment	135,633	05	74,746	55	05
Materials and supplies	61,064	03	30,079	49	02
Other	238,902	09	69,446	29	04
Totals by breakdown	$2,395,492		$1,613,586		

Table II.9

Allocations of Funds by Cost Category -- Representative Sample of Vocational Education Projects for the Handicapped in Nineteen States (61 traditional projects; 1973-74)

Category	Combined	Percent	Federal	Percent of Total	Percent of Federal
Total known	$4,069,372	100%	$2,349,211	58%	100%
Total known (by cost breakdown	3,619,647	100	2,074,548	57	100
Contact staff	2,543,097	70	1,445,450	57	70
Noncontact staff	265,644	07	179,965	67	09
Facilities	24,175	01	1,650	06	--
Equipment	309,527	09	249,742	81	12
Materials and supplies	100,537	03	77,012	77	04
Other	376,667	10	120,729	32	06
Totals (by breakdown)	$3,619,647		$2,074,548		

obtained, breakouts by cost category were not available for 10 percent of the known federal expenditures in 1972-73 and 11 percent of both the known combined and federal expenditures in 1973-74.

Table II.8 reveals that of the known 1972-73 expenditures, 83 percent were spent for contact staff, equipment, materials, and supplies; only 6 percent were allocated for noncontact staff and facilities. Most of the funds in the "other" category were spent for the transportation of students to schools and to work sites. Thus it can be concluded that approximately 93 percent of all known funds allocated for the program in 1972-73 were used to provide direct services to handicapped students. Of all federal funds, 92 percent were used for direct services. The figures for the 1973-74 school year were approximately the same.

A highly significant finding emerges from a comparison of fund allocations between school years 1972-73 and 1973-74: In 1972-73, federal funds accounted for 74 percent of the total expenditures; the corresponding figure for 1973-74 was only 58 percent. A check was made to see if this trend held for all 92 projects included in the project level sample, both representative and nonrepresentative. Of all known funds allocated in 1972-73 for the 92 projects, 67 percent were federal; the corresponding figure for school year 1973-74 was only 56 percent. This was true even though federal allocations for 1973-74 were 23 percent higher than for 1972-73. This means that the Part B set-aside program had an accelerating effect on state and local contributions to vocational education programs for the handicapped -- a highly significant fact.

Other findings emerging from the comparison between the two years were:

1. The percentages of both combined and federal allocations for contact staff dropped a few points between the two years, and the percentages for noncontact

staff increased a few points. This probably reflected increased administrative costs due to program expansion.

2. Allocations for equipment increased significantly in 1973-74; the percentage of federal allocations for equipment rose eight percentage points between 1972-73 and 1973-74.

The most important findings of this analysis, however, are that the majority of federal, state, and local funds allocated for the Part B set-aside program were expended for direct services to the handicapped, and that the program served to increase state and local contributions to vocational education programs for the handicapped.

Organizational Structure

Part B set-aside programs were for the most part absorbed into the already existing organizational structures of the schools in which they took place: vocational high schools, regional vocational education centers, comprehensive high schools, and institutions for the handicapped, among others. This is why, as Tables II.8 and II.9 show, the costs of administering set-aside programs were relatively low. Most of the staff hired with set-aside funds were "contact" staff; that is, personnel who work directly with handicapped students. On the other hand, the absorption of set-aside programs into traditional administrative structures tended to diffuse their special missions. The handicapped program was just another "special" program the schools had to administer.

The amount of funds received by a single school to carry out a "project" constituted such a small percentage of all funds administered by the school (and were subject to year-to-year federal appropriations) that priority given to the handicapped program was generally no higher (and often lower) than priorities given to other programs administered by the school. This deficiency was often balanced by the enthusiasm and aggressiveness of personnel hired to conduct projects. Such personnel usually chose to work in the project and were highly committed to special education. They made it their business to avoid as much red tape as possible and to force administrative decisions on issues important to the program. Yet in the absence of such enthusiastic and dedicated personnel, the projects were apt to be lost in the organizational wilderness of most schools, especially large comprehensive and vocational high schools.

Table II.10 shows the distribution of projects by type of school for all 92 projects included in the project level assessment. About 60 percent of all projects included in the sample took place in either comprehensive or vocational high schools. Approximately 40 percent were in institutions exclusively for the handicapped, which included nine sheltered workshops.

Table II.10

Breakdown of 92 Vocational Education Projects for the Handicapped in 24 States by Type of Institution
(1973-74)

Type of Institution	Number of Projects	Percent
Total	92	100%
Ex. for the handicapped	36	39
Secondary comprehensive	42	46
Secondary vocational	12	13
Other	2	02

Most projects were organized with a project director reporting directly to a principal, assistant superintendent (for special education), or superintendent of schools. Under the project director was the project staff. In instances where there were a number of schools included as part of a single project or where local education agencies were funded rather than projects, the project organization was generally determined by the size of the school district. In large school districts, the person at the local education agency level in charge of special needs (generally an assistant superintendent) coordinated the project. In small school districts (and in projects that took place in a single school), school principals were responsible for the implementation and day-to-day operation of the project.

Staffing

Personnel whose salaries were paid by set-aside funds were primarily instructors -- either vocational education instructors for skills training or special education personnel for prevocational training. Funds were also expended for "evaluators" in diagnostic centers and for paraprofessionals and teacher aides.

Almost all instructors employed by the program met state standards for certification in either special education or vocational education. Those who had not met state certification requirements were in the process of acquiring their credentials.

On the whole, project personnel were selected from inside the school system, either from vocational education or special education. Those from vocational education who were teaching special classes usually volunteered for the positions. In Oklahoma the four projects included in the sample (two of which were statewide) were administered by the department of public welfare. The two statewide projects were under the auspices of vocational rehabilitation which, in Oklahoma, is under the public welfare umbrella.

Use of Nonproject Staff and Support

Most projects were self-contained; i.e., whatever services were provided to the students were provided by the projects themselves without help from outside organizations.

Occasionally there were ties established with vocational rehabilitation, but these were rare. The school district was responsible for providing academic instruction; but in many instances, enrollment in the project was the sum and substance of the handicapped students' school activities. In Ohio's larger cities, "coordinators of special needs" were funded (50 percent by the state and 50 percent by the local education agency). One of their responsibilities was to promote services from both within and without the educational establishment for handicapped students. However, in most instances, the nonproject staff and support, if it existed in more than a few projects, was not readily definable.

Staff Training

In all projects included in the sample, staff training was accomplished informally. Rarely was a class established to train staff for a specific project. All of the state schools, and approximately 10 percent of the local schools, provided a semiformal orientation program for new teachers and other personnel, but this was about the extent of the "staff training" provided at the project level. However, most school districts encouraged staff to attend university courses, state seminars, AMIDS programs, and other training opportunities, and provided released time for such training.

Project Involvements

Parents

The project administrators and staff generally agreed that parental involvement in most of the projects was extremely limited. Parents did not seek out project staff for conferences. Nor did project staff encourage parents to become involved in the operation of the project. Of course, parents received whatever report cards the school issued and were sometimes called to the schools for conferences, but such procedures were normal for all students, handicapped and non-handicapped. Data emerging from the parent interviews (Part III) indicate that the schools made genuine efforts to notify parents that their children had been placed in special programs. There was, however, some indication that occasionally parents learned about the program after the fact, and without benefit of personal contact from school or program administrators.

The involvement of parents appeared to be most active in small projects and/or in projects located in institutions not exclusively for the handicapped. The lack of parental involvement in state schools (exclusively for the handicapped) was due primarily to distances between the schools (where the students resided) and their homes.

Advisory Committees

Although vocational education advisory committees existed in most local education agencies, their impact on the Part B set-aside program was at best indirect and at worst nonexistent. Most project personnel knew that advisory committees existed, but few had any contact with them or knew who the members of the committees were or what interests they represented. Where committees were active, they had an indirect effect on programming for the handicapped by recommending or approving occupational training (for the whole school or the local education agency -- not specifically for the handicapped program), but they did not concern themselves with educational programs for the handicapped in particular.

Relationships between Vocational Education and Special Education

One of the most significant findings of the administrative assessment is that the relationship between vocational education and special education at the local level was so close that it was often difficult to distinguish between them. Considering that the two agencies often appeared to be separate "Baltic states" at the state level, this came somewhat as a surprise. In hindsight, however, it is easy to see how the two grew so close together. First, the organizational relationship between the two agencies was quite different at the local level; both reported directly to the same superior -- the superintendent of schools -- and both were concerned with the implementation of actual programs. State and national administrators were once and twice removed from the "firing line," thus bureaucratic concerns were more apt to take precedence over program concerns. Party lines were more clearly drawn and adhered to, and both sought support for their respective positions within their respective organizational channels.

At the local level, both agencies found themselves mutually dependent on each other. When vocational education administrators, who in the past have had very little experience in serving the handicapped, were asked to implement vocational programs for the handicapped, it was only natural that they turned to special education. By the same token, when funds were made available for handicapped programming through vocational education, special education administrators, anxious to provide vocational components for their constituents, sought out vocational education administrators. The result was that old differences began to disappear as both sought to provide services for handicapped students.

Thus in most areas, the two agencies were working very closely together. In some cases, special education personnel served as project directors under principals of vocational schools or school directors of vocational education; in others, vocational education instructors worked under special education personnel, and in some cases, special education teachers were responsible for prevocational training, while vocational instructors were responsible for skills training. In all but a few cases, cooperation between the two types of educators was close.

Of course, disagreements did arise. For example, the vocational instructor of one project explained that one of the problems he had to face was the tendency of mentally retarded students to be overly physical in expressing their appreciation to instructors. "At first," he said, "they are all over the teachers, hugging them, trying to climb on their laps and hold their hands." He went on to explain how necessary it was to break them of this tendency, "to establish some distance from the teachers, and to teach them to look for satisfaction in the task itself, rather than in teacher approval." The special education teacher, on the other hand, said that one of his major problems was that the vocational instructors did not understand the need of mentally retarded students for "concrete and positive reinforcement." He said that many mentally retarded students did not progress because of this lack of understanding on the part of vocational instructors.

This is a classic example of the kind of disagreement that arose between special education and vocational education personnel. Vocational instructors were "job oriented"; special education teachers were "student oriented." Yet by working together in actual training situations, the instructors were able to reach compromises. In the final analysis, this give and take between special and vocational education personnel probably had a beneficial effect on the handicapped students they were serving.

Reporting Requirements

Considering the lack of program information available at the local level (described in the first section of this part), it not surprising that reporting requirements imposed on project administrators by principals, local education agencies, and state administrators were minimal. Usually the only ones required were fiscal reports (to the states). Seldom were outcomes and follow-up reports required at any level (Michigan was a notable exception).

Thus whatever outcomes and follow-up records were kept depended solely upon the initiative of project administrators.

Summary

Most of the administrative costs of the Part B set-aside program were absorbed by the sponsoring schools and institutions. More than 90 percent of the federal funds expended for a representative sample of projects for the handicapped in nineteen states were spent for direct educational services. The percentage of federal funds to support the program dropped between eleven and sixteen percentage points between school years 1972-73 and 1973-74, thus indicating that the Part B set-aside program had an accelerating effect on state and local contributions to vocational programming for the handicapped.

One of the reasons for the low administrative cost of the program was that projects were absorbed into the existing organizational and administrative structures of the sponsoring schools or institutions.

The projects were in most cases self-contained, using few resources from agencies outside the education system. Parental involvement in most projects was minimal, and very little use was made of advisory committees.

The relationship between vocational education and special education at the local level was much closer than similar relationships at the state and federal levels. Although disagreements arose between the two agencies, compromises were reached, and cooperation, based on mutual dependence, was close.

The Instructional Program

The interviews (summarized in Part III) indicated that both students and parents expressed extremely favorable attitudes toward the projects in which they or their children were enrolled. If one can judge solely from expressed attitudes, the Part B set-aside program appeared to be a success. Six out of ten project completers (who were no longer in school) held jobs at the time the interviews took place. Because of the absence of a control group, it was impossible to determine whether project participants were more successful in finding jobs than their handicapped counterparts who did not participate in the program. Nevertheless, considering that most of the students interviewed were classified as "mentally retarded," the program's placement rate appeared to be good.

It should be borne in mind, however, that student and parent attitudes may have been biased by two factors: (1) many, if not most, of the students were in programs designed to serve their specific needs for the first time in their school careers, and (2) mentally retarded students (who constituted a majority of the students interviewed) are more likely to be positive about school than their non-handicapped counterparts. Moreover, the extent to which the training was responsible for placements was impossible to determine.

The above comments are not meant to downgrade the findings of Part III, but to put them into perspective. If one can judge from the 92 projects included in the project sample, there are wide variations in both the type and quality of projects funded throughout the country under the Part B set-aside. The goals of programs include at least the following: diagnosis and assessment, prevocational training, the provision of counseling services, the acquisition of special equipment, and of course, skills training. The clientele ranges from the severely mentally retarded and emotionally disturbed to high level (or borderline) educable mentally retarded individuals. The teaching techniques vary from rudimentary to highly sophisticated, and the training that teachers receive in serving the handicapped ranges from nonexistent to graduate degrees in special education. Projects are regular, special, and a combination of the two, and they are operating in depressed rural areas and in suburban and urban areas with varying unemployment rates and industrial mixes. The instructional content, for example, runs the gamut of a program in New York City to teach trainable mentally retarded students how to travel on the subway to a highly sophisticated skills training program in the suburbs of Detroit for students with several different types of handicaps.

Indeed the variations encountered in the field were so great that it was impossible to synthesize the 92 projects into categories of vocational programming for the handicapped; and in some ways, the overall program defied analysis -- statistical or otherwise. Most important of all, without understanding the difficulties encountered daily by project administrators and instructors -- who in many cases must settle for "small victories" -- an analytical presentation would lack meaning.

The project descriptions presented below, taken directly from notes made by researchers on site, are meant to communicate the complexity of the overall program, the effect of various environments and clienteles on project content, and the day-to-day unfolding of programs as seen from the point of view of instructors and administrators. The descriptions are followed by discussions of: (1) selection and referral, (2) curriculum and teaching methods, (3) guidance and counseling, (4) equipment and materials, and (5) outcomes information.

Project Descriptions

The projects described below illustrate not only the diversity of programming throughout the nation but also the thorny problems faced by administrators and instructors in implementing the Part B set-aside program. In some cases, they provide a "feel" for what goes on day to day in the classroom and raise serious questions regarding expected outcomes. They also point up the difficulties in attempting to assess, ("evaluate") such a diverse program.

The researchers' notes, upon which the descriptions are based, were edited to eliminate subjective opinion, but otherwise were left intact. However, the names of teachers and students (where they were mentioned) were changed for reasons of privacy.

A Small Town in the Southwest

(Observation of a team of three instructors teaching "related" subjects to horticulture, food service, and laundry service students.) About fourteen students were scattered around three tables coloring a dittoed picture of an iron and the letter I, following step-by-step instructions given by William, the horticulture teacher, and Mary, the food service teacher. William is easygoing and warm. When he talks to students or passes them, he puts his hand on their shoulders. He rarely speaks without a grin, and the students seem eager to please him. Mary, on the other hand, speaks formally, like a teacher. "To whom do we say please?" she asks. "I didn't see a hand raised, William."

Marjorie, a black student, legally blind, and brighter and more forward than most, would banter humorously with William, then cringe away when Mary spoke to her.

The third teacher had a "you're not going to get away with anything" game going with one student. The student would hold his picture up to show her. She'd say, "that cord isn't finished, Jim." Jim was only interested in the game he was playing with her, though he was getting his work done.

All of the students but two seemed either severely retarded or disturbed. Several had serious physical problems. Only one seemed capable of reading. They were heavily dependent on attention from the teacher. A few would lapse into complete inactivity when direct attention was not being paid to them. Most would respond strongly to personal attention.

They were being taught to follow instructions carefully: "When you finish coloring the cord on the iron, stop. Wait for us"; or: "Remember to outline the handle before you color it." Motor control . . . Bill's hands flapped sloppily, but somehow he managed to keep most of the colors inside the lines. Colors . . . Marjorie, almost totally blind, writes her name in perfect script, each letter a different color. Manners . . . classroom behavior.

"At other times", William says, "they tie their shoes, brush their teeth, comb their hair" -- all the minute details of existence, and simple day-to-day tasks are slowly and carefully presented. Most of the students try hard to learn, mainly to please the teachers. Mary says that this "doing for the teacher" is what gives her so much satisfaction -- more than she would get in the "disrespectful" atmosphere of a regular classroom.

A Large Northeastern City

The Part B programs consist of two woodworking classes in the basement of a junior high school. All the students are classified as educable mentally retarded, most black or Puerto Rican. The first class is taught by a retired cabinetmaker, mild mannered, soft spoken, and patient; the second by a six-foot seven-inch giant in his mid-twenties. Both are white. The atmosphere in the retired cabinetmaker's class is calm but busy. All of the students are working on "projects"; the instructor goes from table to table offering help and advice. Although he keeps his distance, he seldom touches the students; they seem to like him. He says: "These kids are slower than most, but I don't think it's because they are mentally retarded. They just fell behind in school from the first grade up, and now they're in trouble. The problem is that most of them will never become carpenters; some of them have no talent for it at all. I don't know what courses they should be taking, but it's obvious that most of them should be receiving some other kind of training."

The atmosphere in the second class is hostile, and the huge instructor is a frank, blunt man. He says that he's in the wrong job. "I wasn't meant to be a baby sitter."

Like the first teacher, he says that his students are not mentally retarded. "They're discipline problems, and the reason they hired me is because I'm a big white man among small black students. I was hired to scare them." He complains about the educational approach: "All they're interested in here is having the kids do 'projects' so that they can display them out in the hall." He complains about the materials: "Look at that lumber. It's so green and warped that it's impossible to do anything with it."

The new principal said later that the second teacher's application for a transfer is now being processed.

A Midwestern Suburb

More than a hundred handicapped students from five different school districts are referred to a regional vocational center for skills training. The students spend one-half day in their regular schools and one-half day at the vocational center. At the center, the students are placed in fifteen different skills training classes with regular (non-handicapped) students, and two classes which combine the handicapped with the disadvantaged. The latter two classes are "janitorial services" and "health services" (mainly nurse's aide). The school is new and modern, and the equipment is excellent. The special education teacher who administers the project (under the direction of the principal) keeps meticulous records, sees to it that the placement and counseling services of the school are made available to "her students," and conducts follow-up studies.

When students are referred to regular classes, the instructors are not told that the students are handicapped. This leads to endless speculation among the instructors. "I suspect," says the distributive education teacher, "that those two are yours." The special education teacher immediately changes the subject. Similar remarks were heard in other classes.

In another situation, five whites who are severely mentally retarded are enrolled in the janitorial class with four disadvantaged blacks. "What are the eleven steps for stripping and finishing this floor?" the instructor asks. Immediately, five white hands go up in the air. "How about you, Tony?" he asks one of the black students. Tony smiles and starts to answer, but he only gets to the third step.

Finally Tony says: "Look, I know how to clean this floor. I don't *need* those eleven steps."

The white hands are persistent. The teacher calls on a boy with a severe speech defect. He laboriously describes the eleven steps and smiles delightedly when the teacher compliments him.

Later, out in the hall, the special education teacher says that it's "not good practice" to mix the handicapped with the disadvantaged unless normal students are also enrolled. "But, what can we do? Those mentally retarded boys you just saw *can* be trained to be janitors and *can* be placed in jobs. The disadvantaged kids can't make it in more skilled classes because they're way behind educationally. Yet they can be placed as janitors and there's good money in janitorial jobs. So we put them in together. Of course, it's impossible to get non-handicapped, non-disadvantaged kids to enroll in the janitorial program."

In other, regular classes, the special education teacher talks in sign language with her deaf students. "How do you communicate with the deaf?" the instructor of a printing class is asked.

"Oh, it's not much of a problem. Usually, I can get across a point by gestures, but sometimes we have to communicate through notes," he answers.

The project is tightly administered, the instructional program appears to be excellent, and the placement record is good.

Institutional Program

The school is located in an old building in a rundown area of a large northeastern city; but inside, the building is impeccably maintained, attractive and excellently equipped. The school provides vocational training for seriously crippled children, including epileptics, diabetics, and victims of cerebral palsy and muscular dystrophy, among others. Part B set-aside funds are used to partially finance a graphic arts course for students already enrolled in the school. The program is designed for eighth and ninth grade students as well as high school students. During its two years of existence, the graphic arts program has placed more than 70 percent of its graduates.

The principal explains that one of the purposes of the school is to instill confidence in the students. "We make them perform as much as possible. We give music lessons, speech lessons, and drama lessons, as well as provide vocational education." After lunch, the students present scenes from "Hamlet." The boy who plays Hamlet has severe cerebral palsy, and the girl who plays his mother performs from a wheel chair. Their fellow students cheer the players enthusiastically. The principal explains that the boy who played Hamlet was afraid to do anything for himself when he first came to the school. "His parents put him in a corner and did everything for him. Can you imagine what that applause means to him?"

Sheltered Workshop

Five towns and a state school for the educable mentally retarded in a New England state joined together to administer a sheltered workshop. About 50 percent of the students are from the state school and 50 percent from the five towns. The program is divided into two phases: prevocational and full-time work. The prevocational phase is run on a regular school schedule; the students spend one-half day in their regular schools and one-half day in the prevocational program. The work phase is full time, for twelve months a year, including two weeks' vacation.

One of the goals of the program is to place students in advanced training and/or in outside jobs. However, the program has not been in operation long enough to determine whether this goal is realistic.

Work Experience Program

The program is operating in a rural area of a Middle Atlantic state. Part B funds are used to fund three work experience coordinators, none of whom work exclusively with the handicapped. They work in the eleven schools of what is called an "intermediate unit." Both special education and vocational education are heavily involved in the intermediate units, but cooperation between the two is not yet "total." The coordinators administer an "employment orientation" program, and develop on-the-job training work stations.

One of the biggest problems they have is finding adequate transportation (in a rural area) for handicapped students. They also complain that they have been unsuccessful in gaining the cooperation of "the old industrial arts department." The coordinators would like to use the industrial arts facilities for their employment orientation program, but the industrial arts director does not want to be associated with anything that "smacks of 'orientation' or 'prevocational' training."

The intermediate unit has developed a "handbook" for work experience coordinators. It includes a list of several thousand jobs that coordinators should keep in mind when looking for work experience stations.

Diagnostic Unit

This project, operating in a large southern city, consists of a mobile Singer-Graflex vocational evaluation trailer, including ten testing units, which moves from one high school to another throughout the year. Approximately 308 students (not all handicapped) were evaluated during school year 1973-74 -- 162 blacks and seventeen whites; 145 boys and 34 girls. Separate evaluation sheets are prepared for the students, indicating how well they performed at each testing station. Copies go to the students' teachers and guidance counselors, but there is no follow up. The evaluation unit director doubted that student programs are modified as a result of the evaluations. Students spend one 2-1/2 hour period per week (for one to ten weeks, depending on how many units they wish to attempt) in the diagnostic lab.

The director of this particular testing unit claimed that he had no problem applying the norms that Singer has established to handicapped students, a common criticism of Singer raised by the directors of other such units. However, the director also admitted that he has had no training in the use of the Singer-Graflex unit.

Summary

Of the seven projects described above, three could be rated as average, two above average, and two slightly below average. Taken together, however, they illustrate many of the problems associated with the implementation of vocational education programs for the handicapped. For example, what kinds of outcomes are expected for programs that deal with trainable retarded students -- students who do not even know how to tie their shoelaces or whose attention span is extremely limited? Some states, Michigan is an example, have decided that vocational education is not the proper answer for "trainables" and have therefore limited their programs to "educables" and other handicapped individuals. Yet a horticulture program for trainables in Texas claims an 80 percent placement rate for its completers.

The two woodworking instructors doubted that their students were actually mentally retarded, as they were classified. One of the instructors complained that most of his students were in the wrong course; the other was obviously not suited to teaching the handicapped. The Singer-Graflex program seemed to operate in a vacuum -- only marginally connected with the students' regular school program -- and the director of the program was untrained in the equipment he was operating. Confusion between "handicapped" and "disadvantaged" individuals was rampant throughout the program; and in some cases, so-called disadvantaged students "lost face" by being placed in classes with the mentally retarded. Conflicts between vocational and special education appeared in the work experience program, and sheltered workshops -- even though they are considered anachronistic by many modern educators -- were still being established.

Nevertheless, the projects were serving the handicapped, and most students and their parents were grateful for them. The negative aspects of the programs were emphasized only to illustrate the complexity of the problems associated with initiating a vocational education program for the handicapped. Thus the project descriptions should serve as a base for the discussions which follow.

Selection and Referral

Two types of evaluations were made of students placed in vocational education programs for the handicapped: (1) evaluation and classification of handicapping condition, and (2) evaluation of student aptitudes. The first was not a responsibility of vocational education; the second was sometimes, but not always, a vocational education responsibility.

Sources of Referrals

The most common sources of referrals for projects in comprehensive and vocational high schools were special education classes either in the high schools or in the elementary schools of the districts. Students enrolled in "regular" classes were sometimes referred to the projects by instructors and/or guidance counselors, but they constituted a minority of the enrollment in the overall program.

In institutions for the handicapped, students already enrolled were placed in the Part B set-aside projects. Sheltered workshops enrolled students from institutions, special education classes, and in a few cases, youngsters who were not enrolled in schools or students who had completed skills training programs but were not yet ready for outside employment.

Almost all trainable and low-level educable mentally retarded students were referred to the Part B set-aside program by special education teachers. On the other hand, high-level educable mentally retarded students, as well as students classified as "learning disabled" or "emotionally disturbed," were often referred from regular classes. Most of the physically handicapped were in institutions, but a few were referred from regular and special education classes.

Screening, Diagnosis, and Evaluation

Virtually all of the student evaluations observed during the couse of the project level assessment were of the "student aptitude" type -- orientation and prevocational programs (which included assessment components), and mobile and stationary assessment and diagnostic units. These assessments, however, were not used to screen individuals in or out of the program but to determine in which general area of vocational education they should be placed.

The evaluation and classification of students by handicapping condition generally occurred long before the students were referred to the vocational program. In all but a few of the 25 sample states, formal evaluations of students by multidisciplinary teams were mandated by state law. In a few states, however, evaluation and classification was left up to teachers and/or guidance counselors. It should be emphasized that rarely if ever did vocational education or project personnel diagnose and classify student handicaps; however, diagnosis and classification have never been considered a responsibility of vocational education.

Nevertheless, the question of screening and evaluation raised several issues. One was the use of IQ tests alone to classify students as mentally retarded. There was a variety of attempts being made to establish broader, less "culture-bound" methods of classification. Another was the lack of periodic reevaluations of students classified as handicapped. The concern was that once a student is classified as handicapped, he is so labeled for the remainder of his school career, or for life. Several states (Massachusetts and Pennsylvania, for example) passed laws requiring periodic reevaluation of students classified as mentally retarded, seriously emotionally disturbed, or learning disabled.[5]

In areas where minority populations were large, one of the most sensitive and emotion-packed issues was the classification of minority students in one of the mentally handicapped categories. One southern administrator said that when a program is "black-heavy," due to the "misclassification" of black students, the result is that white students who are "legitimately" retarded are not served. In many large cities, teachers and administrators were openly cynical about a classification system that produced handicapped classes that were made up almost solely of minorities. "Look around you," said one teacher, "notice the color of my students. Isn't it interesting that all of them are black?"

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[5] HR69, which permits parents access to school records, will probably make the labeling of students an unlikely occurrence.

Criteria for Handicapping Condition

For students enrolled in the set-aside program, there were no problems in classifying physically handicapped or trainable mentally retarded students. The vast majority of the more severely handicapped students was already in institutions and obviously in need of special attention. One issue that arose, however, was whether "trainables" should be referred into vocational education programs. A large majority of the administrators and instructors interviewed believed that the set-aside program should be reserved for those handicapped individuals who had the potential for competing on an equal basis in the labor market. Trainables, they contended, did not have this potential.

As for the classification of students as educable mentally retarded -- there were two problems, one relating to the aforementioned IQ scores, and one to the difference between mentally retarded and "disadvantaged" students. An IQ of 75 was the standard cutoff for educables in most areas of the country, but in some it ranged up to 85. Most school districts held well-to-established cutoffs, but the IQ test, as a measure of mental retardation, was being challenged in many areas of the country -- especially in large metropolitan areas.

In smaller schools, no attempt was made to separate educables from the disadvantaged. "The disadvantaged are handicapped," said one administrator. "Ten out of ten handicapped are disadvantaged and ten out of ten disadvantaged are handicapped," said another. While projects where this attitude prevailed were a minority, they did exist, and in some cases they existed out of what administrators believed was necessity. "If we didn't lump our handicapped and disadvantaged together," said a project director in a small midwestern town, "we might not have enough kids in either category to qualify for state grants."

The most nebulous of all categories was "emotionally disturbed" and "learning disability." Both were based primarily on behavioral definitions. Thus if a student was having or causing trouble, he might very well be labeled as emotionally disturbed or learning disabled. If such a policy were carried to the extreme, all students who did not conform to a prescribed "norm" could be classified as "handicapped." In a few states, instead of classifying students in existing categories, they created new ones ("socially maladjusted," for example, or "educationally handicapped").

It should be emphasized that most of the personnel interviewed in connection with the project level assessment were "project" or vocational education administrators and instructors. Their knowledge of the evaluation and diagnosis process was at best superficial. "We accept whomever they send us," one project director said. "Classification by handicap is not our can of worms." It was not possible, therefore, to assess the evaluation and diagnosis process in depth. Nevertheless, there were many indications that the classification of students in mentally handicapped categories (except trainable mentally retarded) was a source of tension to educators, students, and the general public.

Educational Plans

One of the purposes of multidiscipline evaluation teams and aptitude and assessment programs was to work out an educational plan for each individual student. Such plans included the kinds of academic or remedial basic education the student should receive and the vocational area in which he should be placed. These plans served the function of steering students into specific programs, but once they were placed in programs, the plans were generally forgotten. In some of the smaller projects, records were kept in an informal and personal manner, yet they often included the kind of detail that was conducive to the development of individual program goals. In a New York City project, for example, daily records were kept of student activities and progress, and plans for each succeeding day were worked out in advance. One Michigan project used a computer to prepare on a weekly basis a unique set of activities for each student, based on the student's abilities, accomplishments to date, and goals.

Such projects, however, were exceptions. The general rule in most projects was that students would work together on the same topics for the same length of time -- toward predetermined course goals that existed before the students were placed in the classes. This general focus would narrow to the individual only when students were placed in work experience situations. Even then, student in-school activities would not be geared to individual needs.

Curriculum and Teaching Methods

In the early days of the Part B set-aside program, a substantial portion of the funds were spent on curriculum development. Researchers returned from the field with reams of this kind of material from virtually every state. It covered every vocational area and broke courses down into modules geared to individualized instruction techniques. In some of the newer regional schools and/or institutions this material, as well as more sophisticated curricula developed by universities, was being used. In the majority of the projects, however, curricula and teaching techniques were far more traditional.

New York is one of the states that has developed some excellent curriculum materials. Yet when a small motor repair teacher in upstate New York was asked about his curriculum, he replied: "When they can fix all of the things I can think of to mess up this engine with, then they've learned what I have to teach them." Individualized instruction in a small Texas project consisted of a young, weather-toughened lawn maintenance instructor, wearing faded jeans and cowboy boots, hunkered down over an electric lawnmower, exploring with two boys the reasons why the mower stopped running.

Nearly all of the instructors interviewed expressed a theoretical commitment to individualized instruction, but as with "mainstreaming," that commitment had not yet been translated into action -- except to the extent that "hands-on" vocational training (which by its very nature is individualized) is practiced.

The reasons for this discrepancy were that most classroom teachers did not have the time to develop their own curricula, nor did they have access to materials that had already been developed. Why the latter is true was unclear, but it is seldom that state developed curriculum materials were found at the project level.

It was outside the scope of this study to assess the relationship between "innovative" or traditional classroom techniques and the overall quality of programming. However, the general impression that emerged was that the newer materials worked best in large institutions for the handicapped, or in regional vocational centers which were equipped with the latest teaching aides, and sometimes in computerized systems for developing individualized educational plans. The lack of such equipment in smaller schools appeared to render advanced curriculum techniques impractical. However, it should be emphasized that in the smaller projects, the personal attention received by students was far greater than it was in the larger, more "advanced" institutions. Most instructors throughout the country, even those in modern schools and institutions, believed that personal, noncomputerized, nonmachine attention was extremely important in serving the handicapped --

especially during the early phases of their training. The ideal would be a combination of the two; but in many areas, especially rural and urban areas, the resources to achieve this ideal were not available. In Dade County, Florida, this special attention was provided to handicapped students in regular classrooms by aides, funded from Part B funds set aside for that purpose.

Occupational Offerings and Range of Class Hours

The definition of vocational education contained in the 1968 amendments is, in part, as follows:

> . . . vocational or technical training or retraining which is given in schools or classes (including field or laboratory work and remedial or related academic and technical instruction incident thereto) under public supervision and control or under contract with a state board or local education agency and is conducted as part of a program designed to prepare individuals for gainful employment or semiskilled or skilled workers or technicians or subprofessionals in recognized occupations . . . (emphasis added).

This language indicates that vocational education for the handicapped means "skills training," or training for "gainful employment" in skilled, semiskilled or technical positions. However, data taken from class enrollment figures for 71 of the 92 sample projects (Table II.11) shows that 65 percent of the handicapped students enrolled in the 71 projects were in non-skill training courses. Of these, 55 percent were enrolled in prevocational courses.

This raises the question of whether set-aside funds were in most instances being used to fulfill the intent of the Act. For example, should non-skill training courses be financed with vocational education funds or with other funds appropriated for the handicapped?

Table II.11

Enrollment by Type of Training
(71 Projects)*

Type of Training	Enrollment	Percent of Total
Total	9,350	100%
Skills training	3,232	35
Non-skills training	6,118	65
Skill training	3,232	100
Trade and industrial	2,065	64
Health occupations	277	09
General business	231	07
Agriculture	230	07
Gainful home economics	183	06
Distributive education	66	02
Graphic arts	35	01
Piano tuning	4	--
Other nonspecified	141	04
Non-skills training	6,118	100
Prevocational	3,371	55
Nongainful home economics**	829	14
Tutoring	796	13
Evaluation	416	07
Travel training	237	04
Sheltered workshops	214	03
Mini skills	140	02
Industrial arts	94	02
Other	21	--

*The fourteen "unique" projects were eliminated from the table; occupational information was not available for an additional seven projects.

**These projects were judged by research teams as "nongainful" home economics; they were considered by project personnel, however, as "gainful."

The answer to this question depends to a great extent upon the types of handicapped individuals who are referred into the program. If trainable mentally retarded individuals are referred to the vocational education program -- and 12 percent of the total enrollment is classified as "trainable" -- skills training may not always be possible. The same is true for seriously but educable mentally retarded students, who were often enrolled in sheltered workshops, and to many students who were classified as seriously emotionally disturbed and learning disabled.

These issues related once again to the absence of planning at any level for overall educational services for the handicapped. It would seem that the first priority of the set-aside program should be to provide skills training for handicapped individuals who, although they may need special educational services to succeed in vocational education programs, were judged capable of competing on the open labor market with non-handicapped individuals. If vocational education were to serve this target group, other funds (special education funds, for example) could be used to provide non-skills training for those who are not and never will be capable of competing on the open labor market. However, if this were to happen, it would necessitate coordination of planning, from the local to the national level, involving such agencies as special education, vocational education, research and statistics units, vocational rehabilitation, and perhaps other agencies. Such planning was not taking place in most of the areas visited in conjunction with the project level assessment.

The courses in the 92 projects ranged over the entire spectrum of vocational education offerings, but the largest number were in the trade and industrial category (primarily male), home economics (primarily female), and prevocational (primarily younger students). As in other programs, the range of training was considerably wider for men than for women. Most female students were enrolled in home economics, health occupations, and prevocational training. The remainder were scattered throughout distributive education and office and clerical classes. Of course, the number of occupational offerings included in the trade and industrial category is much larger than the number of occupations in the home economics and health occupations categories. This factor, more than any other, accounted for the wider range of occupational training for men.

However, it should be noted that in the judgment of ORC researchers, most of the home economics courses were not "gainful," even though they were so billed by project staff. If this judgment is correct, the amount of skills training available to women in the 71 projects was very slight indeed.

One significant finding of the assessment is that there were few differences between the types of skills training in which the mentally handicapped were enrolled and those in which the physically handicapped and those with sensory handicaps were enrolled.

Table II.12 shows the ranges of hours that students were enrolled in the representative sample of 61 traditional projects. Nearly 60 percent of the students spent between eleven and twenty hours per week in the set-aside projects, and 34 percent spent more than twenty hours in set-aside classes. Virtually all enrolled students had other school attachments while enrolled in the projects.

Guidance and Counseling

Only a few of the larger projects paid for guidance and counseling personnel from project funds. Most students enrolled in set-aside projects had other school attachments and, theoretically at least, had access to the regular school guidance and counseling staff. Within the projects, project directors and work experience coordinators were most likely to serve as surrogate counselors. The instructors of special classes and prevocational courses were more likely to deal with the individual problems of their students than did instructors of regular classes.

Table II.12

Range of Student Hours -- Representative Sample of Vocational Education Projects for the Handicapped in Nineteen States (61 traditional projects)

Student Hours	Number of Projects	Percent of Projects	Number of Enrollees	Percent of Enrollees
Total	61	100	7,071	100
Information not available	11	18	947	13
Known information	50	100	6,124	100
1 to 5	10	20	1,635	27
6 to 10	9	18	910	15
11 to 15	14	28	1,083	18
16 to 20	7	14	407	07
20 or more	10	20	2,089	34

There was considerable involvement of regular guidance counselors in the selection, testing, and referral process that brought students into the projects. However, although there were widespread assurances that school counselors were always available to students enrolled in the set-aside program, there was little evidence of actual involvement on a day-to-day basis. As noted previously, the projects tended to become self-contained. Most student services, including guidance and counseling, were provided by project staff.

In the larger schools, nonproject staff were more involved in job placement and orientation activities. In many instances, vocational rehabilitation staff provided placement services; in others, regular vocational education work experience coordinators, instructors, and job development personnel worked with students in the set-aside component.

Equipment and Materials

The quality of equipment and materials did not appear to be a major concern to most project personnel. Most rated available equipment as "adequate" or better. This may be due to the fact that the majority of the students were in the educable mentally retarded category and used the same equipment provided for regular classes. Most physically handicapped students and those with sensory handicaps were enrolled in institutions that in most cases were excellently equipped to deal with specific handicaps.

Yet it was apparent that the quality of equipment varied considerably throughout the country. In the newer institutions and vocational centers, the equipment and materials were up-to-date and of high quality. In the older institutions and many of the older vocational and comprehensive high schools, the equipment was more apt to be outdated and in constant need of repair. The overall impression that emerged, however, was that project personnel considered equipment and materials a low-priority item. There was little evidence that they were acquainted with some of the more sophisticated equipment that has been developed especially for the handicapped in recent years. The fact that only 5 percent of Part B set-aside funds were used for the purchase of equipment and materials supports this contention. On the other hand, one reason that administrators were reluctant to use set-aside funds for the purchase of equipment and materials was that they wanted to avoid the charge of using funds for the handicapped to purchase equipment and materials which could be used by all students -- handicapped and non-handicapped.

Program Costs and Outcomes

The lack of cost and outcomes information was documented in the first section of the project level assessment. The cost information presented in this section pertains to

25 of the 64 traditional projects included in the representative sample -- the only projects for which cost information was complete. The outcomes information pertains to only 18 projects for which such information was complete.

Project Costs

Because of the lack of placement and follow-up information, it was not possible to calculate costs per placement. However, for the 25 projects mentioned above, which accounted for 36 percent of the enrollment in the 64 traditional projects, it was possible to calculate per enrollee and per completer costs for school year 1972-73. The breakdown was as follows:

Category	Number	Cost
Total enrollment (25 projects)	2,749	
Total completers	1,456	
Total combined (federal, state, and local costs)		$3,491,011
Total federal costs		1,268,490
Combined costs per enrollee	1,270	
Federal costs per enrollee	462	
Combined costs per completer	2,398	
Federal costs per completer	871	

It should be noted that federal costs accounted for only 36 percent of the total costs of the 25 subsample projects, whereas for the sample as a whole (in school year 1972-73), federal costs accounted for 74 percent of all costs. This may indicate that where state and local funds were the major source of project financing, better fiscal records were kept.

It should also be noted that the cost information outlined above pertained solely to project costs; it did not include the ordinary costs of providing handicapped students with an education.

Outcomes Information

Complete outcomes information was available for only twenty of the traditional projects included in the representative sample. Of these, fifteen were classroom-laboratory and five were work experience projects. Twelve were special projects (for handicapped students only), and eight were either regular or combination. Enrollment in the twenty projects equaled about 30 percent of the total enrollment in the 64 traditional projects. Obviously, on the basis of the information available, it was not possible to reach any firm conclusions regarding the relationship between post-program performance and the experience students receive in various vocational education programs. However, the twenty projects occurred in fourteen of the 24 states in which the project level assessment took place and encompassed all important variables. Thus their totals may give some indication of how well the program was working during school year 1972-73.

Table II.13 shows that of the 2,009 enrolled in the twenty projects, only 6 percent dropped out, 57 percent completed, and of those who completed, 48 percent were placed in jobs, 58 percent of which were training related. Approximately 33 percent of the completers reenrolled in regular vocational education programs or in other training.

Table II.13

Outcomes Information for Twenty out of 64 Traditional Vocational Education Programs for the Handicapped included in a Representative Sample of 74 Projects in Nineteen States (1972-73)

Enrollment	Number	Percent
Total enrollment	2,009	100%
Dropouts	127	06
Completers	1,155	57
Reenrolled	727	37
Total completers	1,155	100
Placed in jobs	557	48
Training related	322	58
Nontraining related	235	42
Reenrolled in school	380	33
Unemployed	169	15
Unknown	49	4

Information from the follow-up interviews, summarized in Part III, indicates the following:

1. Four out of ten completers who were still enrolled in school were employed.
2. Six out of ten completers who were no longer in school were employed.
3. The average wage received by completers out of school was $2.17 an hour; the corresponding figure for completers in school was $2.07 an hour.
4. Seventy percent of the employed completers were in the following kinds of jobs: service (41 percent), miscellaneous (18 percent), and clerical and sales (11 percent).
5. Eighty-four percent of the completers were employed in the following industries: miscellaneous service (36 percent), trade (20 percent), government (14 percent), and manufacturing (14 percent).

6. Work experience enrollees earn more than non-work experience enrollees.
7. Eighty-one percent of the employers who hired handicapped completers rate their general attitude as "good."
8. Twenty-five percent of the employers interviewed who did not participate in the program believed that if they hired handicapped persons, they would have to make changes in the work environment; only 7 percent of the employers who were participating in the program said such changes were necessary.

Summary

Although outcomes information for school year 1972-73 was sparse and inconclusive, the data that were available indicated that the program was working well. Costs per enrollee and completer were not excessive, and placement rates of between 48 and 60 percent (for completers) were good, especially in view of the fact that about 33 percent of all completers reenrolled in school. The unemployment rate for completers was only 15 percent, and the dropout rate was a very low 6 percent.

Because of the sparsity of outcomes information, it was not possible to compare completer or placement rates by type of training received, nor was it possible to compare the costs of various types of programs. However, the follow-up interviews indicated that work experience completers earned more in the jobs they obtained than those who were not in work experience programs. Results of the employer interviews indicate that one of the major constraints limiting the expansion of work experience programs is that many employers believe that if they hire the handicapped, they would have to make major changes in their work environments (see Part III).

PART III

CASE STUDY INTERVIEWS

CASE STUDY INTERVIEWS

As part of the overall assessment of vocational education programs for the handicapped, 24 programs in five states were selected for in-depth study of both participants (students) and their parents. The overriding purpose of this portion of the research effort was to talk to those involved in the programs to assess perceptions, attitudes, and experiences of those most directly concerned with training of the handicapped -- the participants. In addition to interviewing participants and parents, a number of employers were also interviewed at each program site.

This study was basically descriptive in nature; therefore no hypotheses were started before data were actually collected. No external comparison groups were selected. Comparisons will be made between program completers and current enrollees, various demographic subgroups and respondents categorized by other relevant program factors. While not wholly satisfactory for assessing the similarities and differences between handicapped students enrolled and not enrolled in vocational training programs, the study does provide an estimate of the direction and magnitude of impact of these programs on the lives of handicapped students.

Study Objectives

Four areas of inquiry were covered in this study. First, and perhaps most important, was the assessment of program effectiveness as viewed by students, parents, and employers. Specific issues addressed in this portion of the study include: (1) how the students got into their program, (2) what they were taught, (3) what they liked and disliked about their program, and (4) how they evaluated specific program components, such as teachers, equipment, and work environment.

A second facet of the study was an assessment of the job experience of each student interviewed. Jobs held both in and out of school were discussed in some detail with the interviewers. Current jobs were the subject of particular interest especially for those now out of school who had completed a training program. Completers and current enrollees were also questioned on whether they would like to continue in the line of work introduced as part of their program.

The third area of inquiry focused on the characteristics of participants and their families and the attitudes of parents about the program. The principal question of interest in this area -- Who are the participants? -- is discussed in the next section.

Last, viewpoints of employers were examined in detail. Employers who had hired program participants were contrasted with those with similar characteristics who had not taken the opportunity to hire students from the programs under study.

Research Design

As previously stated, the overall design of this study called for in-depth interviews with participants (students enrolled in selected programs), parents or guardians of participants, and employers, both participating and nonparticipating. Initially equal numbers of completers and current enrollees of various programs were to have been interviewed -- five hundred in each group. Interviews with a total of a hundred participating and 75 nonparticipating employers were called for in the original design.

Sample Selection

The approach to sample selection was part purposive and part random. Five states -- Illinois, New Jersey, North Carolina, Ohio, and Texas -- were selected on a purposive basis. Selection criteria included:

(1) Support of state administrators for the personal interviewing of students and parents

(2) Geographic location of the state

(3) Operating programs of sufficient size to allow random selection of a participant sample of two hundred without visiting more than five program sites

(4) Programs in operation continuously for two or more years

(5) Programs providing an urban-rural mix for study

Programs within each state were selected randomly with a probability proportionate to their size of enrollment. A total of 24 programs was selected. Specific respondents at each program site were also selected on a random basis. Lists of current and previous year enrollees were compiled by site visitation teams consisting of ORC and DMI professional staff. From these lists of students, a random sample of 1,126 was originally chosen to be interviewed.

Table III.1 gives the participant sample recovery rates for each of the 24 programs studied. Recovery ranged from a high of 100 percent in six sites, to a low of 69 percent in Mt. Vernon, Illinois. Overall recovery was 89 percent.

Table III.1

Vocational Education for the Handicapped Study Program Sample Recovery

	Student-Parent Sample			Employer Sample	
	Original Sample	Completed Interviews	Percent of Overall Recovery	Original Sample	Completed Interviews
Illinois:					
Joilet	74	58	78%	10	10
Alton	26	24	92	4	4
Decatur	12	12	100	2	2
Carmi	32	30	94	5	5
Chicago Heights	61	56	92	10	0*
Mt. Vemon	29	20	69	4	4
New Jersey:					
Jersey City	102	97	95	14	14
Paterson	91	87	96	17	17
North Hunterdon High (Califon)	10	10	100	2	2
Edison	6	6	100	2	2
North Carolina:					
Nashville	50	44	88	8	8
Fayetteville	70	64	91	11	11
Yanceyville	40	40	100	7	7
Windsor	36	36	100	6	6
Swanquarter	22	16	73	3	3
Ohio:					
Warren	10	10	100	2	2
Columbus	10	10	100	2	2
Cincinnati	143	106	74	19	19
Cleveland	84	74	88	12	12
Texas:					
Denton	47	45	96	8	8
Mexia	59	52	88	9	9
Abilene	21	18	86	3	3
Harlandale I.S.D. (San Antonio)	74	70	95	12	12
Camey-Knox I.S.D. (Knox City)	17	16	94	3	3
Total	1,126	1,001	89	175	165

*Refused.

The sample of employers was selected on a purposive basis. Participating employers at each program site were identified by program administrators. The number of employers to be interviewed at each site was allocated on a proportional basis. Nonparticipating employers were selected by matching size and type of industry to the participating employer sample at each site. Again the number of nonparticipating employers was determined by the proportion of participating students served at that site.

Problem Areas

Several problems were encountered during the implementation of the study design. The programs selected randomly for study in each of the five states did not have sufficient numbers of completers to allow a fifty-fifty split between completers and current enrollees. Therefore only 321 completers were interviewed, compared to 680 still enrolled in their programs.

A second problem encountered during the interviewing in some areas was the fact that some parents refused to allow interviews with their children, or the children were unavailable for a variety of reasons (travel, hospitalization, and so on). Thus 39 interviews were completed with parents only. The opposite was also true. Twelve students were interviewed but their parents or guardians were not present. This latter problem was the result of the students' living outside the nuclear family. At three sites in Texas, interviews with counselors in state institutions were substituted for parents' interviews. In these cases it was impossible to contact the parents individually since they lived anywhere from three hundred to four hundred miles away from the institution where their child was residing, and in many instances the students were wards of the state.

The last problem hinged on cooperation. In virtually every site interviews with students and parents were welcomed by program administrators. At one site, however, school officials refused to allow interviews with employers in their area. This reduced the total number of employer interviews by ten.

Methodological Insights

At the outset of this study, it was feared that interviewing handicapped students, especially the mentally retarded, would pose a significant problem to data collection. This fear was later proved to be groundless. In fact, field staff reported few problems with parent or student cooperation. A majority of participants (56 percent) responded to interviewers with an eager and friendly attitude -- a somewhat larger proportion than typically found among a "normal" sample. For roughly three out of four respondents comprehension was not a problem, even though 90 percent of the sample was classified as mentally retarded. A majority of those interviewed answered with confidence and command of the language. Comments from interviewers in the field suggest that nearly all would welcome a similar assignment again.

Summary

The data collected in this portion of the overall assessment of one hundred programs for the handicapped provide a first look at the vocational education experiences of these students. It must be remembered that the opinions reflected in this portion of the larger study stem from approximately one thousand interviews in five states. This sample is not projectable to the universe of handicapped students across the country. Nevertheless, the results contained in the following pages provide a benchmark for further study of the impact of vocational training among handicapped students.

Participants and Parent Characteristics

Nine out of ten participants interviewed in this study were identified on program records as mentally retarded. While no specific mental ability measures were incorporated into the personal interview with participants, subjective appraisal by trained professional interviewers suggested that against the criteria of verbal comprehension and language facility, a large majority of those interviewed performed at acceptable levels.

Personal Characteristics

A summary of personal characteristics of participants is given in Table III.2. A sizable majority of participants in all states was males. Blacks outnumbered whites in North Carolina (88 percent), New Jersey (59 percent), and Ohio (51 percent). The median age in four of the five states was approximately 17.5 to 18 years. Those interviewed in New Jersey were much younger overall, with a median age of 15.5 years.

The person most frequently interviewed for the parent-guardian portion of the interview were the participants' mothers. Thus the occupation of nearly half the adults interviewed was that of housewife. The household size for most participants was large -- the median number in a participant's family was six. One out of four participant households received public welfare assistance.

Student Status

Participants were classified as completers if they had finished a vocational program in the school year 1972-73. One out of three participants (32 percent) were program completers. This number was much smaller than anticipated because of programs designed for two- or three-year duration. The percentage of participant completers by state was: Illinois, 35; New Jersey, 36; North Carolina, 11; Ohio, 48; and Texas, 32.

The number of completers may be further divided into those still in and those out of school. Of the completer group, 40 percent were still in school at the time of the interview. The remainder -- six out of ten -- were not attending school on a regular basis.

Table III.2

Summary Measures of Participant Characteristics*
(In percentages)

	Total Sample (1)	Illinois (2)	Ohio (3)	New Jersey (4)	North Carolina (5)	Texas (6)
Sex:						
Male	63%	61%	58%	64%	70%	63%
Female	37	39	42	36	30	37
Race:						
White	38	58	57	25	11	50
Black	51	40	51	59	88	20
Spanish-surnamed	10	3	2	16	0	30

*The median ages of the participants were: (1) 17.6; (2) 17.8; (3) 18; (4) 15.5; (5) 17.5; and (6) 17.8.

Program Characteristics

Programs studied in five states provided a look at the vocational training experience in a variety of program settings. The four major classroom environments included:

1. Regular classroom: Handicapped students integrated with regular students, most frequently held in a campus vocational laboratory
2. Special classroom: Handicapped students separated from regular students, most frequently held in a campus vocational laboratory
3. Sheltered workshops: Handicapped students, separated from regular students, meeting in an off-campus classroom setting
4. Job: Handicapped students meeting individually or in small groups off campus in a supervised work environment

Participants were most likely to have received their training in special classroom settings (48 percent). Students integrated into regular classes totaled 25 percent of the sample. One out of five was trained in a sheltered workshop setting. Only 7 percent received their vocational training in job settings.

All participants in North Carolina were in special classes. Texas ranked second in the number of participants in special classes with 78 percent. This was doubtless due to the fact that two sites chosen randomly for participant-parent interviews were state-run resident schools. Conversely, in Illinois eight out of ten (77 percent) were in regular classrooms. Participants in sheltered workshop settings were most numerous in New Jersey (49 percent).

Classroom enrollment differed not only by state but also by characteristic of participant. (See Table A-3 in the Appendix.) For example:

1. Regular classroom and job settings attracted older participants (median age, nineteen years).
2. The majority of regular classroom participants was white, while the majority in special classes was black.
3. The largest proportion of participants from welfare households was found in sheltered workshops.
4. Sheltered workshops contained the largest number of participants who had a work experience component as part of their training.

A work experience program may be defined as "programs of vocational education for persons who receive instruction through cooperative, jointly planned and supervised arrangements between schools and employers alternating classroom instruction with on-the-job experience." Of the total sample, 25 percent were in programs that had work experience components. Work experience was concentrated in three states: New Jersey (56 percent), Texas (43 percent), and Illinois (28 percent).

Summary

Participants in this study came from a variety of program settings and displayed a wide spectrum of personal attributes and characteristics. The experiences of younger and older students, black and white, male and female participants may be traced with precision in the following sections. In addition, the program impact of different classroom types and the presence or absence of work experience may be assessed from the data. When the numbers of participants contained in any subgroup approaches a level not suitable for analysis, the data are flagged with an asterisk (*).

Program Assessment: The View of Participants and Parents

The purpose of this section is to explore vocational education programs as experienced and evaluated by participants and their parents or guardians. Discussed below are the perceptions of both groups of how they first were introduced to the program, why they enrolled, and what type of classes they took. In addition to these experiences, the attitudinal domains of both groups were tested. General likes and dislikes were volunteered by participants and parents or guardians. Specific program attributes such as the nature of the work were evaluated. Finally, possible problem areas for training handicapped students (i.e., inability of teachers to make themselves understood) were tested.

Participants' Introduction to the Program

Throughout, participants identified a variety of communication channels by which they were made aware of their vocational education program (see Appendix Table A-4). One-fifth (21 percent) of the students said the school they were attending gave them their first introduction to the program. Another fifth (20 percent) mentioned a specific person affiliated with their school -- the principal, a counselor, or the vocational education coordinator -- as the one who introduced them to the program. Still another fifth of the students (22 percent) credited their classroom teachers as the first source of program information. Approximately two-thirds of those interviewed (63 percent) learned about it first through the school system.

Generally speaking, responses suggested a perception on the part of participants that those introducing the program had made some special effort:

". . . A letter was sent (by the school) asking if I wanted to go . . . "

"The program supervisor came to school and talked."

"Mr. Gonzales, the principal, came to our school and talked to my class."

"A lady from the school came to my home and wanted me to come here."

"The teacher came to my house and told me."

Transfers from other programs accounted for the first exposure of one out of ten (11 percent) participants. Of the remaining students some 9 percent said they first learned of the program from relatives or peers. A small group (2 percent) were proud that they had selected the program on their own. One student said, "I told them I would like to go down to that program," and another made out his own schedule to include the program. While this does not reveal how they first heard about a program, it does show their initial encounter was likely to have been positive.

Specific participant subgroups varied somewhat in the source of their first program encounter:

1. Special classroom and sheltered workshop students were more likely to have been transferred into the program than those in either regular or on-the-job classroom settings by about five to one.
2. Regular classroom students tended more to have learned of the program from relatives and friends than other-type classroom students.
3. The mentally handicapped student had a greater chance of being transferred into the program than the physically handicapped or those with sensory handicaps.
4. The younger the participant, the more likely he or she was to have been transferred into the program or to have learned of it directly from the school. Older students tended to understand and respond to the program because of friends and relatives more than the other students.

Parents' and Guardians' Introduction to the Program

The two major sources from which parents or guardians first learned of the vocational education program were the school system and its personnel and/or their child. Nearly half (49 percent) heard of the program through the school, while another 19 percent heard of it directly from participating students. (See Appendix Table A-5.)

Responses suggest for the most part a genuine effort on the part of school personnel to deal directly and courteously with parents. There was, however, some indication that occasionally parents learned about the program and their child's participation after the fact, and without benefit of personal contact from school or program administrators. One parent said she was unaware that such a program existed until "my son brought some papers home for me to sign." Another expressed surprise when "my son brought home things he had made." Nevertheless, only one parent in twenty (5 percent) indicated that the program and their child's participation in it were not made known to them for their consent.

Summary

Both students and parents heard of the vocational education program first through the school systems involved. Responses generally indicated a high degree of personal contact between school and program personnel and the participants' families. Only a very small number gave some indication that the initial contact with the program was not a satisfactory experience.

Reasons for Enrollment

A summary of the most frequently mentioned reasons for program participation is presented in Table III.3. Nearly one in four parents or guardians (23 percent) stated that their child was enrolled in the vocational education program because he or she was a slow learner. A close examination of parent subgroups revealed that parents in New Jersey were most likely to give this response (61 percent). It is important to note that the age distribution of New Jersey participants was significantly younger than for other states.

Table III.3

Summary of Reasons Given for Enrollment by
Parents or Guardians in a Vocational
Education Program

Reason Given	Percent
Child a slow learner	23%
Prepare child for a job (general)	16
For specific job training	11
Conform to child's desire	9
No choice or alternative available	7
Give child individual attention	6
Recommendation of others	55
Improve child's behavior	4
Keep child in school	3
Help child overcome physical handicap	2

Training (11 percent) and job preparation (16 percent) were the next most frequently mentioned reasons. Illinois and Ohio residents cited both more frequently than did parents in other states.

In North Carolina a larger than average percentage of parents placed their children in the program for the individual attention they would get (13) or because the children wanted to enroll (13). In Illinois 18 percent were in the program because of their expressed desire to enroll.

Other subgroups varied in reasons for enrollment, particularly concerning the children being slow learners: 34 percent of the work experience component students, 34 percent of the sheltered workshop students, 31 percent of the students whose family income was connected to public welfare, 27 percent of the blacks, and 28 percent of the Spanish-surnamed students were enrolled because they were slow learners. Many of these subgroups were concentrated in New Jersey. However, the major reasons given for enrolling students in the program were to deal with slow learning abilities and to train and prepare handicapped students for jobs.

Program Subject Matter

Table III.4 identifies the mix of program content described by participants. Many students took woodshop and woodworking classes (19 percent). The next most frequently mentioned classwork was orientation to the world of work (14 percent). Other class content included general shop, 7 percent; construction skills, 7 percent; home economics and homemaking, 7 percent; sewing, 7 percent; industrial arts, 6 percent; cooking 6 percent; typing, 6 percent; and general piecework, 5 percent.

Table III.4

Ten Most Frequent Program Content Areas

Type of Classwork	Percent
Woodshop or woodwork	19%
Orientation to the world of work	14
General shop	7
Construction skills	7
Home economics or homemaking	7
Sewing	7
Industrial arts	6
Cooking	6
Typing	6
General piecework	5

Subject matter studied varied by participant subgroup. Special classroom and sheltered workshop students took more woodshop and woodworking classes than students in regular classrooms. General shop was mentioned most often by regular classroom students. General piecework was done almost exclusively in sheltered workshops.

The differences between male and female class content were significant. Male students took more woodshop and woodworking, general shop, construction skills, and general piecework. Female students clustered in classes of home economics and homemaking, cooking, sewing, and typing.

Younger students took more woodwork and woodshop than older students, where the emphasis was more on construction skills.

Participants' Attitudinal Evaluation

This section begins by assessing general likes and dislikes related to the program volunteered by participants during the interview. Proceeding from general to specific attitudinal topics, participant attitudes toward their program's helpfulness and level of difficulty will be assessed. Several components of the program environment -- the facility, the tools, and the like -- will be measured. Finally, possible problem areas of communication, teacher rapport, and so forth, will be examined.

Participant Likes and Dislikes

Table III.5 identifies the five most frequently mentioned likes and dislikes volunteered by participants. It must be noted that only 5 percent of those interviewed could not identify something favorable about the program, while nearly one out of two (44 percent) could find only good things to say, even when asked what they liked least.

Training received in the vocational education program created the greatest favorable impact on the students; 54 percent mentioned training as the element they liked most about

Table III.5

Summary of Program Likes and Dislikes

Attitude	Percent
Like the most:	
Training	54%
General positive comments	10
Job preparation	5
The people	5
Making money	5
Like the least:	
General negative comments	17
Working conditions	14
The teacher	5
Program-related conditions	4
Other students	3

the program. This kind of response was given at least five times more frequently than any other single favorable response. Those most likely to mention training were the young, the black, the Spanish-surnamed, and students in North Carolina, Texas, and New Jersey. Conceivably, those who mentioned job preparation could be combined with the favorable training responses increasing this favorable program attribute to nearly 60 percent.

Nearly one in ten participants said what they liked most about the program was either the teachers (4 percent) or the people they worked with (5 percent). Students in regular classrooms, the physically handicapped, those over nineteen years of age, and those in Illinois and Ohio were most pleased with the relations they had with their teachers or other people in the program.

Those who received their classroom training on the job indicated that making money was a major satisfaction arising from their vocational education program. One in four (25 percent) of those students mentioned that the money they earned was the thing they liked most about the program.

Only 5 percent of the students could find nothing good to say about the program. This included 10 percent of those in sheltered workshops, 9 percent of those over 21 and 10 percent of those in Ohio.

The largest category of specific negative reaction to the program was disapproval over the working conditions (14 percent). Many (17 percent) gave general negative comments that could not be categorized. Of those remaining, 5 percent gave responses indicating a dislike of some teacher-related incident, 3 percent voiced a dislike for other students, and 4 percent said that the conditions under which the program operated were not to their liking. Nearly half of the students (44 percent) could find nothing negative to say about the program.

By subgroups, classroom type appeared as an important variable. Special classroom and sheltered workshop students expressed above-average dislike for their program working conditions. Those in the sheltered workshops were most likely to be displeased overall. Two out of three in sheltered workshops voiced negative feelings, compared to only one out of two overall.

The mentally handicapped were more displeased with working conditions than the physically handicapped or those with sensory handicaps. Female students showed a greater dislike for working conditions than male students.

Of the various ethnic groups, Spanish-surnamed students revealed the greatest overall negative feelings -- centered mostly on working conditions; 30 percent expressed a dislike for this component of the program. White students had more negative teacher-related incidents than other students and were more negative overall than the average. More than half (53 percent) of the black students made no negative comments.

Dislikes varied with age, but not in any linear fashion. The oldest students, those over 21 years of age, were the most critical, especially in the area of working conditions. Those fourteen and under were the least critical. However, the second most critical age group was the fifteen- and sixteen-year-olds. They expressed high dislike with working conditions and the highest dislike for teachers.

The students in Texas were the most critical of the vocational education programs. Only 29 percent had no dislikes, and nearly as many (27 percent) were unhappy with the working conditions. This situation was probably linked to the dislike many of the students had for the state schools in which they resided and not directly attributable to the components of the program.

Evaluation of Specific Program Components

Table III.6 summarizes attitudinal responses to specific program components. The most outstanding finding demonstrated in this table is that nearly eight out of ten participants rated each component favorably.

Such overwhelming positive response leaves little in the way of variability to be accounted for by participant subgroups. Nevertheless, some noteworthy differences between subgroups did emerge from the data.

Nine out of ten students found the program helpful. Current students had a more favorable outlook than completers, with 93 percent saying that they found the program helpful, compared to only 85 percent of the completers. Younger students rated the program

Table III.6

Summary of Attitudes toward
Various Program Components

Attitude	Percent
Like the teacher	93%
Found the program not too hard	92
Found the program helpful	90
Liked the tools and equipment	87
Liked the physical environment	87
Liked the treatment from other students	80
Liked the work	75
Was not bored by the program	72

more helpful than older students. By state, the least positive response was found in Ohio; only 79 percent of the participants there rated their programs helpful -- still a majority of positive feeling.

More students (72 percent) did not find the vocational education program boring. However, there was some variation in responses by subgroup. Completers were more likely to have been bored than current students. Students in special classrooms were the least bored. Whites (68 percent not bored), and Spanish-surnamed students (72 percent not bored) were less pleased with the pace of the program than blacks (81 percent not bored). The youngest student subgroup, those fourteen and under, expressed less boredom than other students.

Most of the students liked the work they were doing, with the possible exception of those in sheltered workshop settings, Spanish-surnamed students, fifteen- and sixteen-year-olds, and Ohio and Texas students. While the majority of the students in these subgroups did not express a dislike for their work in the program, the favorable percentage was smaller than that reported by students in other subgroups.

Students in sheltered workshops were not so likely to express satisfaction with peers as other group members. Only 67 percent of those students in sheltered workshops said they liked the treatment they received from their fellow students. Not unexpectedly, females were a little more hesitant than males to express a like for the tools and equipment at their disposal and the treatment accorded to them from other students. Whites were also more critical of the tools and their fellow students than were members of other ethnic groups.

Possible Problem Areas

Communication, discipline, helpfulness of others, and ability to use the tools provided for participants were the potential problem areas probed in this study. Table III.7 summarizes the results. The overall result was positive. Only 11 percent of the students said they had trouble understanding their teacher. Those who had the most trouble were students in sheltered workshops (15 percent), those over 21 (15 percent), those under fourteen (20 percent), and those in New Jersey (18 percent).

Table III.7

Summary of Participant Response
to Possible Problem Areas

Problem Area	Percent
Teacher got mad	35%
Others (peers) not helpful	29
Tools too hard to operate	12
Teacher couldn't communicate	11

Twelve percent of the students found the tools and equipment too hard to operate. This group was made up of those in sheltered workshops (14 percent) or on-the-job classrooms

(17 percent), those with physical handicaps (15 percent), and students in Ohio (14 percent) and Texas (14 percent).

While 35 percent of the students in all five states had teachers "get mad" at them, this was made up largely of students from Texas (44 percent) and New Jersey (50 percent). (It must be remembered that Texas had a number of students living in state-run institutions, and participants in New Jersey were the youngest as a group.)

Overall, only 29 percent or less than three in ten participating students, indicated they did not receive help from classmates. Again, the figure from those in sheltered workshop-type classrooms (37 percent) was higher than the average.

Summary

Student evaluation of the program was fundamentally good. Most liked the training they received and the people with whom they associated. Tools and equipment were not found to be too hard to operate, classes were not boring, and the environment was generally favorable in terms of teachers, classmates, and working conditions.

Yet there were some who were critical of various aspects of the program, and the data link various subgroups with their criticisms.

Parents' Attitudinal Evaluation

Parents and guardians of participants were asked the same basic set of attitudinal questions that had been asked of their sons and daughters. Their responses to these questions is the topic of this section of the analysis.

Parents' Likes and Dislikes

In comparison with participants, parents gave slightly different responses when asked what they liked most and least about the program. The findings are summarized in Table III.8. Like the students, the single most frequently mentioned response (41 percent) was the job training received. This was particularly true in New Jersey (64 percent), among those whose children were in programs with work experience, components (51 percent), the Spanish-surnamed (52 percent), and those on some form of public welfare (46 percent).

Table III.8

Summary of Program Likes and Dislikes: The Parents' View

Attitude	Percent
Like most:	
The training	41%
Child's new-found independence	16
Develops child's abilities	12
General positive	11
The teachers	2
Like least:	
The training curriculum	13
Shortages of materials, tools, and so forth	5
General negative	4
Lack discipline	3
No job placement	3

A response not mentioned by students, but which was the second most frequently mentioned by parents, was the independence training the program provided the child. Sixteen percent made this comment. Parents were happy that their child was learning a means toward self-sufficiency and responsibility. This response was given frequently in Illinois (22 percent), Ohio (22 percent), and Texas (24 percent), but was surprisingly low in North Carolina (6 percent), and New Jersey (6 percent). Parents of completers (20 percent), regular and job-type classroom students (21 and 22 percent, respectively), and whites (19 percent), gave this response more often than other subgroups.

Development of the students' abilities through the program (12 percent) was viewed favorably by parents, particularly in Ohio (20 percent), and Texas (18 percent). This positive feature was also mentioned more frequently by parents with children receiving on-the-job training (20 percent), and among whites (17 percent).

Parents were somewhat less likely than students to comment about their dislikes. In fact, more than half (55 percent) did not express a negative view. Parents mentioned curriculum problems more frequently than any other negative item (13 percent) -- it was mentioned more frequently than the next two problem categories combined.

Subgroups most likely to cite curriculum problems were those in sheltered workshops (16 percent), Spanish-surnamed respondents (23 percent), those in Texas (20 percent), and those in New Jersey (18 percent). Shortages of teachers, equipment, materials, and facilities were the next most frequently mentioned problems (5 percent). Parents most likely to cite such problems were Texans (16 percent), whites (7 percent), and those whose children were in special classrooms (6 percent).

One of the dislikes mentioned by parents, but not by students, was discipline. Overall 3 percent made this comment; 6 percent of the New Jersey parents mentioned it -- three times the rate of any other state.

Program Rating

Parents were asked to rate the vocational education program as excellent, good, fair, or poor. Overall 26 percent rated their programs excellent, with higher than average excellent ratings in Illinois (35 percent), and Texas (41 percent), on-the-job classroom types (34 percent), and among whites (36 percent).

The overall "good" rating was 51 percent for a combined excellent or good rating of 76 percent -- nearly eight out of ten parents interviewed.

Special Program Attributes

Parents and students gave similar evaluations of specific program attributes. Parents found the program helpful (89 percent), not too hard (91 percent), and not boring for the children (79 percent); and the work was generally liked (76 percent).

Parents were less likely than students to express favorable attitudes toward the teacher (78 to 93 percent, respectively), the tools and equipment (67 to 87 percent), the place where the school was located (83 to 87 percent), and the treatment given the child by other students (72 to 80 percent).

Possible Problem Areas (Parents)

Parents tended to appraise possible problems differently from their children. They were more likely than students to feel that there would be a communication problem with the teacher (23 to 11 percent, respectively) but less likely to see the tools and equipment as being too hard to operate (4 to 12 percent). They also thought the teacher had become angry with their child less frequently than the child stated (13 to 35 percent) and that the child had more help from his friends than the student perceived to be the case (25 to 29 percent).

Parents' Rating of Child's Growth during or after Program Participation

Perhaps the most significant measure of the program's impact on the family unit centers on perceived improvement or lack of improvement in the handicapped participants' interpersonal skills. Table III.9 summarizes parents' skills improvement ratings for the children in four important areas.

Two out of three parents perceived their child as having improved in the areas of self-reliance, self-confidence, self-image, and social mixing ability since participation in the program began. Less than 3 percent of the parents identified a change for the worse in these areas. Added self-confidence was most frequently mentioned by parents of students in Texas, New Jersey, sheltered workshops, whites, and work experience.

Table III.9

Summary of Parents' Ratings of Child's Progress
in Four Interpersonal Skill Areas during
or after Program Participation
(In percentages)

Characteristic	More or Better	About the Same	Less
Self-reliance	68	28	2
Self-confidence	69	26	3
Self-image	64	31	3
Social mixing ability	67	30	1

Improvements in self-image were most often cited by those whose children were in programs with work experience components and sheltered workshops. There were no major subgroup differences in parental perception of social mixing ability.

Summary

The overriding impression from these results is one of strongly favorable attitudes toward vocational programs for the handicapped. Both students and parents joined in expressions of favorable attitude often including nine out of ten respondents. Judged solely in terms of expressed attitudes, vocational training programs for handicapped children are successful. How the programs fare under the more objective examination of jobs held, hours worked, wages and occupation expectations for the future will be the topic of the next section.

Job Experience

Does job training for the handicapped have an impact on: their employability, their hours worked and wages received, and their expectations for future jobs? These questions provide the outline for the analysis in this section. If they were answered properly, a precisely constituted comparison group of handicapped students would be necessary. Without a matched group for comparison purposes, the analysis is confined to an examination of similarities and differences between subgroups of handicapped students interviewed as part of this study.

Of primary interest is the job experience of three groups of students -- those who were currently enrolled in a program, program completers who were still in school at the time of interview, and completers who were not in school during the study. Where differences occur it must be attributed at least in part to the process of maturation. Indeed the subgroup of completers out of school contains more older students than the other two subgroups. Nevertheless, a portion of the observed differences must be attributed as well to program participation -- how much must remain as an open question until properly tested against a matched comparison group not exposed to a vocational training program.

Current Job Experience

Results reported in preceding sections gave the programs studied such a positive approval that even in the absence of an adequate comparison group, positive conclusions were definitely warranted. Results were much less clear-cut against the criteria of employability, hours, and wages.

Employability

One measure of employability chosen in this study was the presence or absence of a job outside school at the time of interview. Table III.10 summarizes the results for this question.

Table III.10

Current Job Holders

Enrollment Status	Number Holding Current Job
Currently enrolled	2 out of 10
Completer still in school	4 out of 10
Completer out of school	6 out of 10
Total group	3 out of 10

Overall, one in three students held a job outside school when they were interviewed. The number of employed participants increased steadily by enrollment status. Only two out of ten of those currently enrolled held jobs outside school. Among program completers still attending school regularly, four in ten held outside jobs. A strong majority (six out of ten) of completers out of school was working at a job at the time of the interview. If one keeps in mind the age factor, program completion was significantly related to holding a job at the time of the interview.

The highest proportion of then current job holders was found in Illinois, with 56 percent; the lowest proportion in North Carolina and New Jersey with 19 and 17 percent respectively. The low proportion of current job holders in New Jersey may be partially explained by the young age of the average participant in that state. The rural setting of the programs in North Carolina may also be a partial explanation for the low proportion of job holders in that state.

Other points of interest included:

1. Age was positively associated with the proportion holding a current job -- the older the enrollee, the more likely he or she was able to hold a job.
2. Whites were more likely to hold jobs out of school than blacks.
3. No difference in proportions holding out-of-school jobs was found between those with and those without work experience components in their training.

Each respondent was asked to describe their current job and employer. Table III.11 summarizes the reported results to these questions. Four out of ten working at a job at the time of the interview described their jobs as service occupations. (One out of three employers were service or business owners.) Service jobs were concentrated in the area of food and beverage preparation, with 43 percent of all service jobs so classified. The next most frequently mentioned job area was building and related services (20 percent of the service jobs). Other service areas included domestic service (15 percent), miscellaneous personal services (12 percent), and apparel furnishings (9 percent).

Job entry for those holding current jobs, judged solely on the basis of self-report, centered on the job-seeking talents of individual participants and the helpfulness of family and friends (45 percent of those with current jobs indicated either they themselves or family or friends were responsible for getting their job). Next most frequently mentioned help in getting a current job came from teachers, program coordinators, and other individuals within the education system.

Table III.11

Summary of Job Description and Type of Business or Industry

Category	Percent
Job description:	
Service	41%
Miscellaneous occupation	18
Clerical, sales	11
Benchwork	8
Farm, fishery, or forestry	7
Structural work	6
Machine trades	5
Self-employed or technical	3
Processing	2
Type of business or industry:	
Miscellaneous service	36
Trade	20
Government	14
Manufacturing	14
Construction	5
Agriculture	4
Private household service	2
Self-employed	2
Finance, insurance, real estate	1

Hours and Wages

Forty-three percent of those holding a current job worked full time (35 hours or more per week). Considering only those out of school, two out of three (67 percent) were working at full-time jobs. Those still in school worked an average of approximately twenty hours per week part time. Table III.12 summarizes current employment experience of completers out of school. Table III.13 shows the number of jobs held by completers since graduation and their expected earnings over the course of a year.

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CURRENT EMPLOYMENT EXPERIENCE
OF PROGRAM COMPLETERS OUT OF SCHOOL

Sample Base (123)

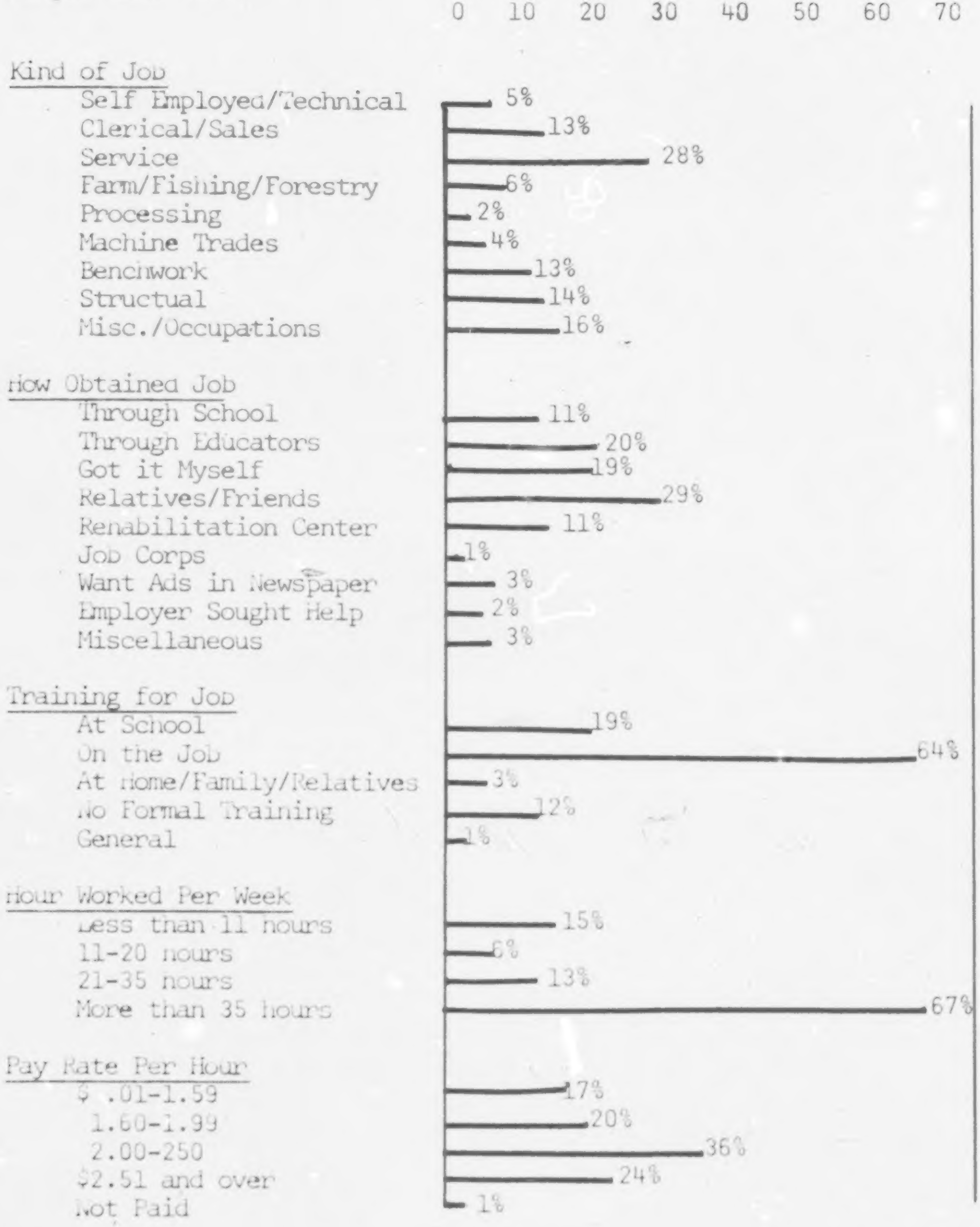

Table III.13

Number of Jobs Held since Graduation from Vocational Education Program by Program Completers not in School*

Category	Percent
Currently employed:	
Same job	51%
One other job	7
Two or more other jobs	3
Currently unemployed (68):	
Two or more jobs	11
One job	11
No jobs	14
Expected earnings in one year of completers (not in school)	
$ .01-$1.59	3%
1.60-$1.99	4
2.00-$2.50	27
$2.51 and over	41
No pay	1
Don't know	24

*Sample base = 111.

Median hourly wage calculated for those with jobs at the time of the interview showed that at least half of the students still in their programs were working for near-to minimum wages ($1.79 per hour). Completers still in school improved significantly on the above rate, with $2.04 per hour as the median split. Completers out of school reported a median hourly wage of $2.17 per hour.

Other findings of interest included:

1. The physically handicapped and/or those with sensory handicaps made slightly more per hour than mentally handicapped students.
2. Men made more than women.
3. Whites and blacks both made more per hour than Spanish-surnamed enrollees.
4. Older enrollees made more than younger enrollees.
5. Enrollees with a work experience component as part of the program earned more per hour than those whose programs did not contain a work experience component.

Future Expectations

Enrollees and parents or guardians alike were asked their opinions of the future as related to their program and job experience. Two out of three enrollees (67 percent) would like to continue in the line of work introduced in their programs. Parents voiced a similar pattern of response (73 percent would like to see their son or daughter continue in the line of work introduced in the program). Generally speaking, the more job experience a participant had, the less likely he or she was to express a desire to continue in the program's line of work. In no case, however, did support drop below a strong majority for continuation.

Evidently participants and parents alike discriminate between the line of work introduced in the program and the job held during program participation. Support for holding a job such as the training program was somewhat less enthusiastic. Only about half of the participants and parents wanted a job like the training program's as future employment.

For participants no longer in school, expectations for a year hence focused primarily on full-time work (two out of three participants and parents expected full-time work one year in the future). Of those currently enrolled, one out of two expected still to be in school one year later. Expected earnings from jobs one year in the future appeared realistic, with most expecting to earn from $2.00 to $2,50 per hour.

Significant Relationships by Sex

The following paragraphs give the male and female breakdown for those in the vocational education program. There were several significant factors related to the student's job experience by sex. The following is a brief summary of the chi square significant factors (see Table III.14):

Currently employed: Thirty-six percent of the 609 males asked this question were currently employed at the time of the interview. Only 27 percent of the 353 females were currently employed.

Hourly wages at current job: Of the 217 males who were currently employed, 49 percent made $2.00 or more per hour at their job; 36 percent of the 96 females made $2.00 or more per hour. One percent of the males did not receive any wages at their job, while 7 percent of the females did not receive any monetary reimbursement at their jobs.

Previous jobs: When asked if they had ever had any previous employment experience, 49 percent of the 609 males gave a positive response, and 40 percent of the 141 females also stated that they had previous employment experience.

Hours worked per week at previous job: A little less than half (45 percent) of the males worked at a full-time job (more than 35 hours per week). Only 29 percent of the females worked at a job more than 35 hours per week. Nineteen percent of the males worked at a job less than eleven hours per week, compared to 24 percent of the females. Of the students working between eleven and twenty hours per week, 14 percent were males and 18 percent were females. Twenty-two percent of the females worked at a job between 21 to 35 hours per week. Seventeen percent of the males worked at a job between 21 to 35 hours per week.

Hourly wages at previous job: Thirty percent of the three hundred males earned $2.00 or more an hour, while only 15 percent of the 141 females earned this amount. Four percent of the females were not paid at their jobs, compared to 2 percent of the males.

Reasons for leaving previous jobs: Of the 441 students who stated reasons for leaving their previous jobs, three hundred were males and 141 were females. Thirty-four percent of the females left their jobs because "it was only a temporary job," while 24 percent of the males left their jobs for this reason. Fifteen percent of the males stated they left the job to return to school, compared to 11 percent of the females. More males (19 percent) were laid off or fired from their job than females (13 percent). Twenty-two percent of the males stated that working conditions were the reason they left, compared to only 13 percent of the females. Seventeen percent of the males and 23 percent of the females gave replies that were classified in "other reasons" category.

Looking for work last three months: Of the 392 males who were not currently working, 31 percent said that they were looking for work. Asked the same question, 24 percent of the currently unemployed females (257) were also looking for work.

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TABLE III.14
SIGNIFICANT RELATIONSHIPS BY SEX

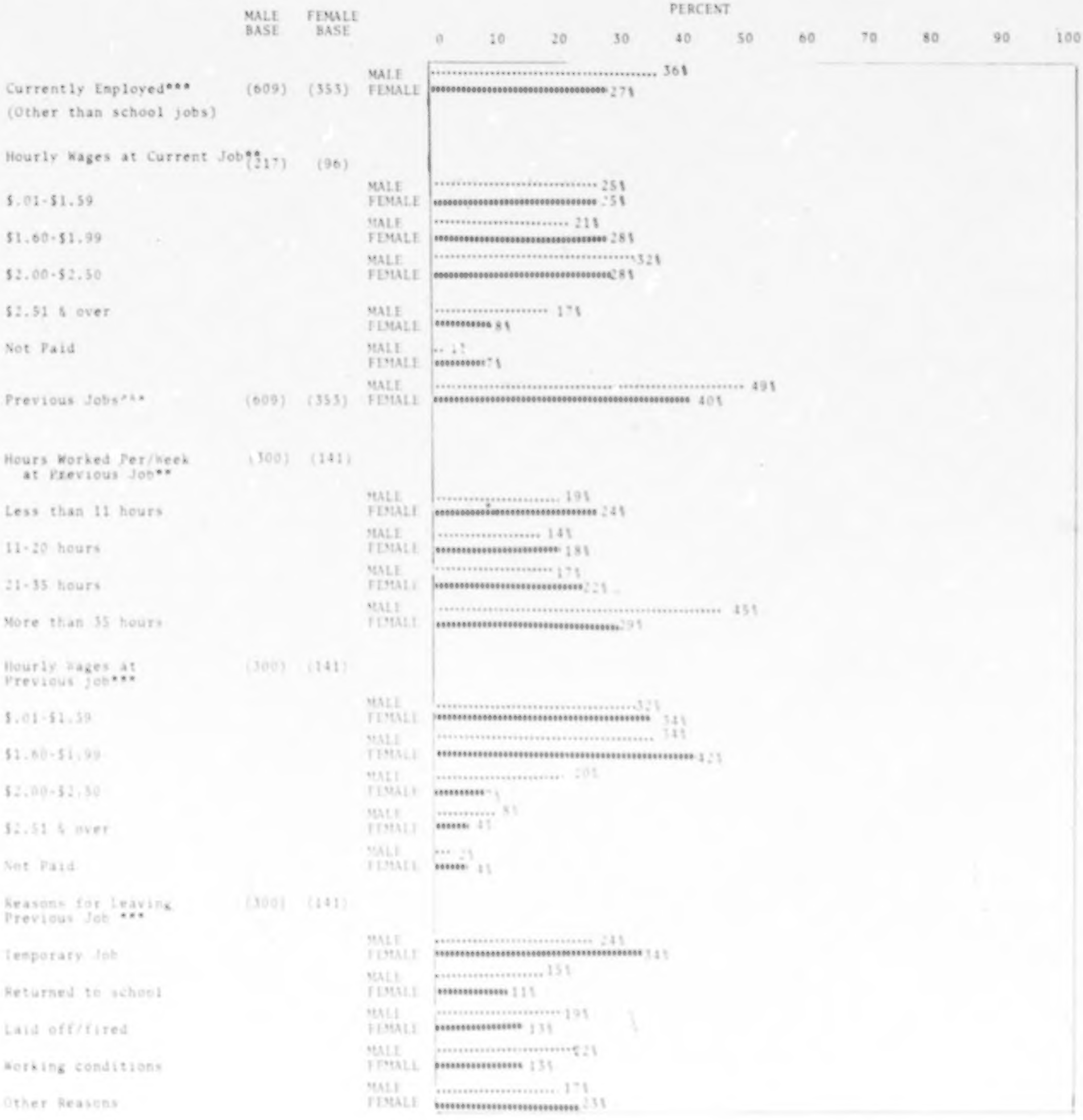

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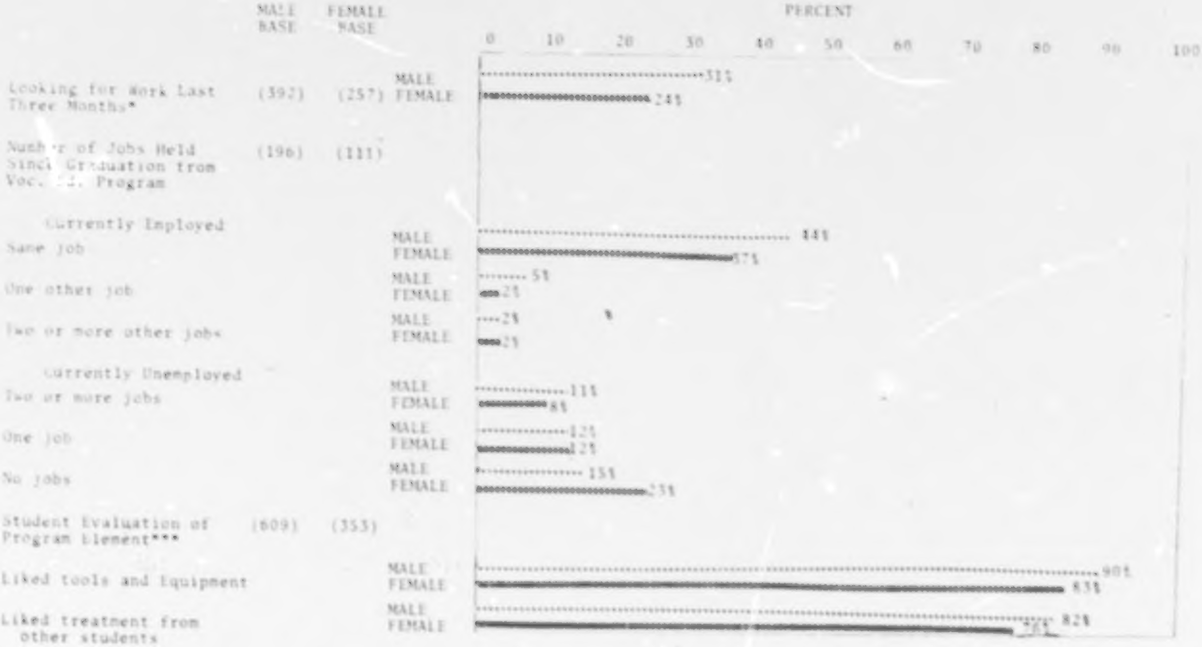
TABLE III.14 (continued)

SIGNIFICANT RELATIONSHIPS BY SEX



*** Chi-Square Significant at the .01 Level
** Chi-Square Significant at the .05 Level
* Chi-Square Significant at the .10 Level

Number of jobs held since graduation from vocational education program: There was a total of 321 students who had graduated or completed the program. Of the 196 males, 54 percent were currently employed. Forty-one percent of the 111 female program completers were currently employed. Of the 54 percent employed males, 44 percent had but one job since graduation and this was their current job. Five percent had had one other job, while two percent had two or more previous jobs since completing the vocational education program.

Thirty-seven percent of the currently employed females were at their same job since graduation from the program. The remaining 4 percent of the employed females were split evenly, 2 percent had one other job and 2 percent had two or more previous jobs.

Eleven percent of the males had had at least two or more jobs since they completed the program but were currently unemployed. Eight percent of the currently unemployed females had at least two or more jobs since graduation. Twelve percent of the males and 12 percent of the females had one job since graduation but were currently unemployed.

Fifteen percent of the males compared to 23 percent of the females had never been employed since graduation from the vocational education program.

Student Evaluation of Program Elements

There were two significant elements that emerged from the student's evaluation of the program elements. Ninety percent of the males and 83 percent of the females liked the tools and equipment they used while participating in the program. A majority of the males (82 percent) and females (76 percent) liked the way they were treated by other students.

The Employer Sample

"Hire the handicapped" is more than a cliche to 94 employers in five states who were interviewed as part of this study. To be considered a participating employer, each

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had either hired completers of vocational education programs for the handicapped or participated by providing work stations for vocational training programs sponsored by the schools. Seventy-one interviews were completed with nonparticipating employers, matched on the basis of size and type of establishment with participating employers. The total number of completed interviews with employers was ten short of the expected completion rate because of the refusal of school authorities to allow employer interviews at one site. The reader is cautioned against making strong inferential leaps from these data due to the small sample size.

Response to the Program among Participating Employers

From the participating employers' view, handicapped students were eager employees who were anxious to learn their jobs (see Table III.15). In general, their expressed attitudes toward the job and work setting were good. Most importantly, handicapped student workers compared favorably with regular workers.

Table III.15

General Attitude of Handicapped Student
Workers as Perceived by Employers

Attitude	Percent
General	
Good	81%
Fair	13
Poor	4
Don't know	2
Total	94
Willing and eager to learn job	92
Not willing and eager to learn job	6
Dont' know	2
Total	94

The performance of program participants was compared with that of regular workers on eight job evaluation measures. The results of these comparisons are presented in Table III.16.

Table III.16

Comparison of Handicapped Student
Workers with Regular Workers
(In percentages)

Evaluation	Punctuality	Absence	Productivity	Positive Attitudes	Acceptance with Group	Take Direction
More (better)	31%	22%	18%	31%	21%	43%
About the same	56	55	57	50	68	52
Less (worse)	11	20	20	16	9	3
Dont' know	2	2	4	3	2	2

When compared with regular workers, program participants show definite strengths:

(1) Better able to take direction, 43 percent

(2) More interested in work, 34 percent

(3) More punctual, 31 percent

(4) More positive attitude, 31 percent

In no case did a majority of participating employers rate their handicapped student workers less favorably than regular workers. Two slightly weak ratings were given on job performance measures of absence and productivity. Even so, three out of four employers rated the performance of participant student workers "as good as" or "better than" regular workers on each of the eight performance scales.

It would be misleading to suggest that there were no problems associated with hiring handicapped students. Each employer was asked if employee-related problems in eight areas had been encountered over the last two years due to hiring handicapped students. Table III.17 summarizes the results of this question.

Table III.17

Problem Areas Encountered with Handicapped Employers in the Last Two Years

Base	Percent
Safety	10%
Morale	7
Quality control	14
Discipline	20
Morals	2
Insurance rates	2
Legal	1
Union	1
Total	64

Problems with discipline dominated the responses to this question. One employer in five identified discipline as a problem with handicapped student workers. Quality control, safety, and morale were mentioned by approximately one out of ten employers. Judging from the low frequency of problem identification among participating employers it may be safely concluded that whatever the problems that existed, none presented overwhelming obstacles to the effective integration of handicapped students with regular workers.

Experiences of Participating and Nonparticipating Employers

In this section vocational education program experiences of both participating and nonparticipating employers will be explored. Participating employers were asked how vocational education students were referred to them for hire and how they first became involved in the work education program. Advancement and procedures for hiring handicapped students as regular employees were also investigated.

Nonparticipating employers were interviewed about their reasons for nonparticipation and were asked what it might take to get them to participate in the program.

Referral Process and Initial Involvement in the Work Education Program

Initial program involvement and the student referral process stem from common sources as demonstrated in the following paragraphs.

Participating employers were asked to describe the process by which handicapped students were referred to their companies. Several referral sources were identified (see Table III.18). Nearly a third (29 percent) mentioned the school in general, while another 19 percent mentioned a counselor, teacher, or other school supervisor. Seventeen percent mentioned specific individuals, most of whom were associated with the school. A few employers mentioned vocational rehabilitation centers, sheltered workshops, and "halfway houses" as referral sources. Private sources (such as Goodwill Industries), family, and friends made a few referrals.

Employers were asked to describe how their companies first became involved in the work experience program. In the majority of instances, involvement was initiated by a school either through a principal, counselor, or teacher. "School contacts" account for about 30 percent of the responses to this question. Contacts included personal visits by school personnel as well as phone calls and letters. School counselors and teachers constituted a major resource for informing employers about the work education program.

Table III.18

Student Referral Process and Initial Employer Involvement

Category	Percent
How handicapped students were referred:*	
School, general	29%
Individual specified	17
Counselor, teacher, supervisor	19
General, unspecified	5
Vocational rehabilitation	5
Sheltered workshop	1
Halfway house	2
Goodwill	1
Chamber of commerce	1
Relative, family, friends	3
Fellow student	1
Not referred by anyone	13
How participating employers first became involved:*	
School contacted company	15%
Individuals specified	15
Counselor, teacher	10
General, unspecified	16
Company made contact	14
Former owner	2
Unemployment agency	2
Students themselves	7
Word-of-mouth	4
Family, relatives, friends	2
Not involved	4
Neutral	1

* Base is 94.

In fourteen percent of the cases, it was the company that initiated the contact. Responses such as "our company is very interested in taking part in the community, and we seek out these programs to help where we can" are typical of the kind of responses placed in this category.

On a less frequent basis, companies first became involved in the work experience program through unemployment agencies, the students themselves, or informally by word-of-mouth.

Permanent Hiring Procedures

According to the survey, nearly two-thirds of the companies participating in the work experience program hire participants as permanent employees (Table III.19).

Table III.19

Procedures Followed for Hiring Handicapped Students as Regular Employees

Hiring Procedures*	Percent
(1) Hire as permanent employee**	66%
(2) Other***	
School recommended	15
Hired if qualified	36
Hired after probation	11
Must be reliable	8
High school graduate	3
Personal application	5
No special procedure	23
General	8
Other	22

*Two mentions (1) and (2)
**Base is 94.
***Base is 62.

No special procedures were followed by most companies when hiring the handicapped on a permanent basis. Students were hired if qualified. In 15 percent of the cases, the school recommended that the student be considered for regular employment. In just 11 percent of the cases, a probation period preceded regular employment.

Employers were asked how they determined whether a student was ready for regular employment. Nearly one out of four (23 percent) made the determination on the basis of demonstrated ability. Related to this, 11 percent went on the basis of past records of work perfomance with the company. Another 9 percent felt that dependability was the major qualification for hiring, while 7 percent indicated that a probationary period was a prerequisite for permanent employment.

Only 18 percent of those who hire students as regular employees were required to give notification to the school agency. In most cases, the notification was given to the school counselor, teacher, or student supervisor.

Opportunities for Job Advancement

Participating employers were asked: Do you feel there is any room for advancement for the handicapped person with your company? Sixty-two percent of those responding to this question felt there was room for advancement, while 38 percent believed there was not.

The largest number (35 percent) of responses suggested that advancement was based on student qualification. Others mentioned specific types of advancement which might be available to the students. Of these responses, 22 percent equated advancement with more responsibility; 9 percent suggested that students may become supervisors; while 3 percent equated advancement with increased earnings.

Thirty-eight percent of the employers saw no real opportunity for advancement. Of this group, 28 percent described the jobs held by handicapped students as dead-end jobs.

Responses -- such as "there are not too many places they could advance to"; "there is no advancement, it's all the same type of work"; "they are hired for specific jobs and that's all" -- were typical. Twenty-two percent indicated that the students who were working with them were too handicapped to advance farther. Another 11 percent indicated that the jobs were temporary and that students would be replaced by other work experience students coming into the program next year.

Program Response among Nonparticipating Employers

A majority of nonparticipating employers was familiar with work experience programs for training handicapped students. Sixty-one percent had heard of the program, and 14 percent had previously participated in it. Only 16 out of 71 employers had ever been directly approached and had refused to participate.

While numbers were small, several reasons were given by employers for nonparticipation. These are summarized in Table III.20.

Table III.20

Employer Reasons for not
Participating in Program*

Reason	Percent
Don't need help	31%
Students not qualified	31
Work done at plant	6
Inconvenient hours	6
No one has applied	6
General, positive	13
Other	6

* Base is 16.

Thirty-one percent of the employers responding indicated that they did not currently need help, and another 31 percent indicated that the students were not qualified to do the work in the company. The nature of the work done, the inconvenient hours worked, and the fact that no one had approached them about program participation were each cited by 6 percent of the employers as reasons for not participating.

When asked whether they would consider participating in the program, a variety of both positive and negative responses was obtained. These are summarized in Table III.21.

Table III.21

Nonparticipating Employer's Views of
Possible Program Participation

View	Percent
Positive*	
General, positive	19%
If authorized	6
If they were capable	7
If we need help	4
Humanitarian	2
If no help available	2
Negative*	
General, negative	11%
Work too hard	17
Work too dangerous	6
Business not seasonal	2
Too many problems	2
Don't need help	7
Didn't know about program	4

*Base is 54

About 40 percent of those responding had positive feelings about program participating. Approximately 50 percent were negative, with the remainder undecided. A wide range of general positive responses -- such as "we'd hire them if we were authorized"; "we'd hire them if help were needed"; "we'd hire them for humanitarian reasons"; and "we'd hire them if other help was not available" -- were typical of those given.

Of those with a negative reaction, 17 percent felt that the work of the company would be too hard; another 6 percent felt it would be too dangerous; 7 percent simply didn't feel they needed help; and another 11 percent gave general positive responses.

When compared to participating employers, nonparticipating employers were more likely to believe that hiring handicapped students would require significant changes in their business environment. Table III.22 compares the responses of both groups to a set of possible changes required by the employers when hiring the handicapped.

Table III.22

Need for Tailoring Jobs for Handicapped Employers (In percentages)

Extent of Need	Participating Employers*	Nonparticipating Employers**
Adapted equipment -- very or somewhat necessary	7%	25%
Alter equipment -- very or somewhat necessary	4	24
Change facilities -- very or somewhat necessary	1	27
Reduce task complexity -- very or somewhat necessary	42	68
More training -- very or somewhat necessary	61	73
Closer supervision -- very or somewhat necessary	63	80

*Base is 94.
**Base is 71.

In every case, nonparticipating employers were more likely than participating employers to believe changes necessary. Table III.23 shows the characteristics of the employer sample.

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CHARACTERISTICS OF EMPLOYER SAMPLE

Kind of Business

	Agriculture	Construction	Manufacturing	Transportation/Publication	Trade	Misc. Service-Private	Misc. Service-Govern.	Public Administration
Aggregate	1%	1%	13%	1%	27%	55%	2%	2%
State								
Illinois	0	0	0	0	48	40	4	0
Ohio	0	0	9	3	17	69	3	0
North Carolina	3	0	29	0	26	34	0	3
Texas	0	3	9	0	20	54	0	3
New Jersey	0	0	11	0	9	71	3	6

Number of Employees

	Less Than 25	25-50	More Than 50
Aggregate	50%	20%	28%
State			
Illinois	57	14	29
Ohio	35	30	35
North Carolina	50	20	20
Texas	60	20	20
New Jersey	50	15	35

Participating Employers (94)
Non-Participating Employer (71)

191/192

PART IV

EXECUTIVE SUMMARY

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EXECUTIVE SUMMARY

Society's approach to the handicapped -- to those who because of physical, mental, or emotional disabilities do not meet some individuals' idea of "normal" -- has almost always been ambivalent. The reaction of the non-handicapped to the handicapped is often one of discomfort -- and sometimes of manifest revulsion. Employers and their employees often shun the handicapped because of the way they "look" or because they assume that the handicapped are not as competent -- at any job -- as the non-handicapped. Partly as a result of these all-too-common attitudes, the handicapped have been segregated, or have segregated themselves, and until recent years efforts to bring them into the mainstream of society have been both rare and without widespread success.

Many of the difficulties faced by the handicapped are less the result of their handicapping conditions than of society's perception of such conditions. The designation "handicapped" not only sets individuals apart from the rest of the population but also carries a strong negative connotation of incompleteness or incompetence. Attempts to classify the handicapped into such categories as "educable mentally retarded," "speech impaired," "hard of hearing," and "blind" are often arbitrary in their failure to account for individual differences and are sometimes inaccurate or misleading.

These problems are compounded in the educational and employment arenas. Traditionally, there has been little emphasis in vocational education on programming for the handicapped. Handicapped students who could not compete on an equal basis with the non-handicapped had to look outside the regular vocational education establishment for rare opportunities available to them in sheltered workshops, private training programs, or institutions for the handicapped. Even rarer were training opportunities that prepared the handicapped to compete in the open labor market with the non-handicapped. There was little access to the normal world of work for that door was closed.

In the early 1960s, spokesmen for the handicapped began to impress this waste of human potential on the public mind, and in 1963 Congress passed the Vocational Education Act which charged the states with the responsibility of providing vocational programming for the handicapped. After four years had passed, however, this general legislative charge had produced few new opportunities for handicapped individuals. Thus in the amendments to the Act in 1968, Congress required that 10 percent of each state' basic grant for vocational education (Part B of the amendments) be used exclusively to finance programs "for handicapped persons who because of their handicapping condition cannot succeed in the regular vocational education program without special educational assistance or who require a modified educational program." The amendments defined the term "handicapped" as "persons who are mentally retarded, hard of hearing, speech impaired, visually handicapped, seriously emotionally disturbed, crippled or other health impaired persons who by reason thereof require special educational and related services."

The amendments have now been in operation for four years in most states, but as of June 1973, little was known of the strategies adopted by the states for allocating funds under the amendments, state planning for the set-aside program, methods of selecting local programs for support, and the extent of support provided by sources other than vocational education. Consequently, in June 1973, the U.S. Office of Education entered into a contract with Olympus Research Corporation (ORC) to perform an assessment of the Part B set-aside program for the handicapped. The overall purposes of the study were as follows:

(1) To provide programmatically useful information on the relationships between post-program performance and the kinds of experiences that handicapped students receive in various vocational education programs

(2) To identify and analyze existing constraints or limitations in carrying out the various vocational education programs for handicapped students, including constraints internal to the program and those external to the program

(3) To determine the feasibility of expanding a work experience component in vocational programs for the handicapped and the conditions under which expansion is possible

(4) To examine the strategies used by states in identifying handicapped students and their need for services, and the selection of projects for funding

(5) To determine to the extent possible the degree to which funds from the 10 percent set-aside under Part B for handicapped students actually reach handicapped students rather than become indistinguishable from other vocational education funds

ORC designed a three-part approach for carrying out the objectives of the study: (1) an assessment of program administration at the state level, (2) a project level assessment of vocational education programs for the handicapped, and (3) case study interviews with students, parents, and employers.

Visits were made to 25 states, selected randomly with a probability proportionate to total enrollments in the fifty states. Directors of vocational education and special education, program officers, and research and statistical personnel were interviewed at the state level.

A total of 92 projects was visited in conjunction with the project level assessment. The projects were divided into two subsamples: (1) 74 projects in nineteen states which were representative of all projects in those states and (2) a purposive sample of eighteen projects in three rural states and California. To the extent possible, data collection forms (which included enrollment, fiscal, occupational offerings, and outcomes information) were filled out for each project, and interviews were conducted with project directors, school principals, counselors, instructors, and local education agencies' special education officers at each site.

A total of 1,001 student and parent interviews was conducted in five of the sample states, 681 with students currently enrolled and 320 with students who had completed projects during the 1972-73 school year. The number of employers interviewed totaled 165; of these, 94 were participating in the projects and 74 were not participating. All interviews were conducted by Decision Making Information (DMI) under subcontract to ORC.

Through an analysis of the information emanating from these three separate but interrelated parts of the overall study, the attempt to fulfill the objectives of the study was carried out.

Summary of Findings

It should be emphasized that the study conducted by ORC-DMI was an assessment, not an evaluation of the Part B set-aside program. The program was not measured against a set of criteria of what constitutes a "good" program. Rather, the attempt was made to determine how states, local education agencies and schools are coping with the Part B set-aside, both from an administrative and program point of view. The analysis which follows is organized along the lines of the approach taken by ORC; that is, summaries of the major findings of the state and project level assessments, and of the student, parent, and employer interviews. Subsequent sections of the executive summary contain ORC's overall conclusions and recommendations.

Although some of the findings may appear to be negative, it should be kept in mind that the most important finding of the study is that Part B set-aside funding has resulted in vocational education projects for the handicapped that would never had occurred had there been no such legislation and that most of the set-aside funds were being used to provide direct services for the handicapped. Many of the program weaknesses identified in the state and project level assessments were administrative in nature and may be partly due to inexperience on the part of vocational education administrators who have never before been given the responsibility of providing educational services for handicapped individuals. One conclusion is inescapable: If vocational educators were to correct some of the major administrative weaknesses -- weaknesses which may not be their sole responsibility -- funds now being spent to provide direct services for the handicapped would be siphoned off for administrative purposes. This "tradeoff" should be kept in mind when reading the remainder of the executive summary.

The State Level Assessment

The state level assessment was conducted in 25 states. It included analyses of the adequacy of state level management information systems, state administration of the set-aside program, and an operational profile of how states plan for, fund, monitor, and evaluate the Part B set-aside program for the handicapped. The review of statewide management information systems was not limited to the 25 sample states. Data reported by all fifty states to the U. S. Office of Education were reviewed (see below).

Management Information Systems

Each year, the states are required to report a wide range of data on set-aside programs to the Office of Education (e.g., program costs, enrollments, and completions). Because of this requirement, it was anticipated that such data would be readily available at the state level. However, this did not prove to be the case. It was decided therefore that we examine the data reported by the fifty states to the Office of Education to determine whether it would be more complete than information collected by research teams at the state level. It was found that most of the national data were either incomplete or inaccurate. The two subset paragraphs below are an example.

Completer information: The number of completers reported ranged from 4,392 in Florida to none in New York, California, and Ohio. Michigan reported eight completers, Oklahoma 2,240. In Minnesota, 73 percent of the program enrollees completed; the corresponding figure for Texas was only 4 percent. Clearly the states were not in agreement on how to satisfy this particular reporting requirement. Some had no figures at all to report. Others apparently reported scattered completer figures from some but not all of the projects within their states. There were several reasons for the erratic nature of this information. Perhaps the most important was that many states did not require schools to report on completers. The second was that even in those states which required schools to report on completers, there was no common definition of the term "completer." In some states, for example, students were not considered completers until they entered the labor force, or did not reenroll in school (either in the "project" or in other classes). In other states, the sole criterion for completer was that the student remain in school for one year. Regardless of the reasons, national data on handicapped completers was not useful for program monitoring purposes or for making comparisons between states.

Average costs: According to data reported by the states to the Office of Education, average costs per handicapped student ranged from a high of $1,664 to a low of $44. This wide range of per-student costs raised the question as to what the states included in the "total expenditures for the handicapped" category. For example, did they include only those funds that represented expenditures over and above the basic expenditures made for all students, or did they include all expenditures made for handicapped students? It may be that varying interpretations of what is asked for in this category were in part responsible for the wide range of costs per enrollee.

Other data dealing solely with expenditures and enrollments appeared to be more accurate and revealed some interesting insights regarding vocational education programs for the handicapped. For example, a comparison of total state expenditures for the handicapped with expenditures under the Part B set-aside program showed that without the Part B set-aside, there would be few vocational education opportunities for the handicapped. In seventeen states, there were virtually no differences between total expenditures for the handicapped and expenditures under the set-aside program. In all but a few states, the differences were not significant.

Comparisons between percentages of total enrollments that were handicapped and percentages of all funds expended for the handicapped indicate that in most states the costs for educating handicapped students were higher than the costs for educating the non-handicapped; that is, percentages of funds spent for the handicapped were higher than percentages of total enrollments that were handicapped. Thus in 38 states it appeared that total per-student expenditures for the handicapped were higher than per-student expenditures for regular students. However, in twelve states, per-student expenditures for the handicapped appeared to be either the same as or lower than those for regular students.

Finally, in 35 states expenditures for the handicapped during fiscal year 1973 equaled 10 percent or more of total expenditures. This does not necessarily mean that the 15 states whose expenditures were less than 10 percent were not in conformity with the law. Fiscal year expenditure data include not only allotments but also carryover funds from the previous fiscal year. Thus it was impossible to determine whether the fifteen states whose handicapped expenditures were less than 10 percent were or were not in conformity with the law.

The major conclusion drawn from the examination of national data, and from attempts to collect fiscal and program data at both the state and local levels, was that complete and accurate fiscal and program information -- information necessary for the proper monitoring and evaluation of individual projects, statewide programs, and the overall national program -- was not available at any level.

Organizational Profile

All material relating to the organizational operational profiles which follow are based solely on assessment performed in the 25 sample states. Aside from the specific fiscal set-aside, the 1968 amendments detail organizational, operating, and reporting requirements that apply to Part B funds in general but are nevertheless specifically relevant to programming for the handicapped. One of these requirements is the establishment of a state advisory council, which must include a member knowledgeable in the special education needs of the handicapped and which must evaluate the programs funded under the amendments. Another is that state divisions of vocational education enter into cooperative agreements with other agencies in the administration of vocational education programs. State planning, funding procedures, and monitoring and evaluation are discussed in "Operational Profile" which follows this section. The "Organization Profile" section deals with the structures devised by states for the administration of the set-aside program, the use of advisory councils, and interagency cooperation.

State structures: One "program officer" was responsible for handicapped programming in all but one of the 25 sample states. The single exception was a geographically large rural state in which the director of vocational education assumed responsibility for handicapped programming. Program officers operated at the third organizational level; that is, their superiors reported directly to directors of vocational education. They were located in "Special Needs Divisions" (the names of these divisions varied from state to state) which also had responsibility for the disadvantaged. Although the use of only one individual to carry out all administrative functions under the set-aside program resulted in low administrative costs -- a characteristic of this program -- it also explained why state level planning, monitoring, and evaluation regarding programming for the handicapped were at best sketchy and at worst nonexistent.

Advisory councils: In theory, state advisory councils are supposed to assist directors of vocational education in initiating programs for the handicapped. The amendments charge such councils with planning and evaluation responsibilities and also require them to have one or more representatives "experienced in the education and training of handicapped persons." All program officers interviewed were aware of their state councils and of the council liaison officers within their state agencies, and several could identify the handicapped specialists on the councils. However, although not one of the respondents complained of the ineffectiveness of the councils, none cited examples of council activity in any phase of the set-aside program. Apparently there was virtually no concrete assistance provided by the councils, and none seemed to be expected by the program officers.

Relationships with other agencies: The state level assessment indicated that although cooperative relationships existed between divisions of vocational education and divisions of special education -- and in a few states, departments of vocational rehabilitation -- in most states even these were relatively nonproductive, and for all practical purposes, relationships with other agencies were nonexistent.

In Minnesota, a coordinator was jointly funded by vocational education and special education. The sole responsibility of the person occupying this position was to coordinate the activities of the two agencies in vocational programming for the handicapped. In eight other states, persons occupying other positions (either in vocational education or special education) were assigned the coordinating responsibility. In still another twelve states, the only relationship that existed between the two agencies was that special education was given the opportunity to review all proposals for vocational education projects for the handicapped. In the remaining four states, there were no formal relationships between the two agencies.

Formal relationships existed with departments of vocational rehabilitation in fourteen states. However, only seven of these agreements actually resulted in the provision of services by vocational rehabilitation to students enrolled in the Part B set-aside program.

Among the services provided by vocational rehabilitation in these seven states were: placement, counseling, student evaluation, planning assistance, purchase of services not otherwise available, and occasional joint funding of projects. Agreements with vocational rehabilitation were nonexistent in eleven states.

There appeared to be a lack of agreement among state program officers as to whether vocational rehabilitation can legitimately provide supportive and additional services to secondary level handicapped vocational education students. The most common explanation for the lack of direct involvement by vocational rehabilitation was that its client population is of an older age group. However, the fact that in at least seven states vocational rehabilitation did provide services to students in the set-aside program indicates that similar agreements could be reached in other states.

Only four states reported agreements with the employment service, and of these, only two produced a significant amount of activity. Agreements with other agencies were so few as to be insignificant.

Operational Profile

The assessment of state level operation of the set-aside program included the identification of techniques employed to discover the "universe of need," to plan vocational programming for the handicapped, techniques for funding local education agencies or individual schools, and techniques for monitoring and evaluating funded projects.

Universe of need: Although states go through the motions of drafting state plans, including plans for the handicapped, all respondents interviewed were vague as to whether attempts were made to identify the number of handicapped individuals who could benefit from vocational education, or breakdowns of handicapped students by handicapping condition

The general consensus was that these are local responsibilities. However, based on the kinds of information required by states in project proposals and on state reporting requirements, it appeared that state vocational education administrators did not consider the gathering of universe of need information a major priority (this subject will be discussed in more detail in the paragraphs describing the project level assessment).

Planning: Planning was also considered a local responsibility. Planning at the state level was limited to the review of project proposals and decisions as to which proposals would be funded, generally on the basis of the sizes of school districts and other formulas. Factors which mitigated against planning at the state level were the independence of the local education agencies and the fact that only one person was assigned to the administration of the set-aside program.

Funding procedures: Twenty-two of the 25 sample states funded "projects"; that is, specific programs for the handicapped submitted in proposal form to the states by local education agencies and individual schools. Two states, California and Georgia, provided block grants to local education agencies on a formula basis. One state (Illinois) reimbursed schools for each credit hour handicapped individuals were enrolled in vocational education programs.

Proponents of the block grant method of funding emphasized that such a procedure resulted in maximum flexibility to local education agencies, that is, these agencies were not "locked" into specific projects but could apply the funds throughout the school year where they were most needed. There were, however, two weaknesses to the block grant method: (1) states had little control over the programs instituted by local education agencies, and (2) the allocations of set-aside funds to some local education agencies were so small as to be insignificant. The former appeared to be the most serious drawback to the block grant method. Fiscal and program information regarding current programs was virtually nonexistent in states which allocated set-aside funds on a block grant basis to local education agencies. The major reason for this was that local education agencies used a post facto auditing procedure for accounting for set-aside funds; that is, the funds were not applied to service categories until after the completion of the fiscal or school year. State monitoring and evaluation of set-aside programs were virtually impossible under this system. With regard to the second drawback, many local education agencies whose allocations were small turned the funds back to the states. Special projects were then funded with the unused allocations.

States that funded projects had far better control over their programs than those that did not. Program officers could account for services purchased with set-aside funds and the number of handicapped persons enrolled in the projects. In those states with comprehensive reporting requirements (a small minority), it was possible to account for dropouts, completions, and placements (more on this subject below). The question appeared to be whether "control" should be sacrified for local education agency "flexibility." The state level assessment indicated that the "project" method need not result in a lack of flexibility. Project proposals could be modified, often without an excess of paper work, thus assuring some local flexibility. More importantly, there was a certain amount of planning built into the project method. The purposes of projects were spelled out, justifications for the types of projects proposed and the types of handicapped students to be served were contained in project proposals, and the methods which the purposes were to be realized were summarized. These, together with line item budgets, made monitoring and evaluation possible, albeit weak, in most states.

Several states used set-aside funds as "seed money"; that is, projects were funded only if local education agencies or schools agreed to gradually increase local financing of the projects so that eventually the projects would be 100 percent locally funded. One state required assurance that projects would be locally funded during the second year of operation; most required a gradual reduction of federal funds over a three- to five-year-period. A follow-up study should be carried out to determine how the seed money concept is working in practice.

Monitoring and evaluation: In most states, monitoring and evaluation were hampered by the lack of state requirements for vital program and fiscal information. For example, fiscal information was not available in any standard format. There were no breakdowns by anticipated and actual expenditures, and except in some project proposals, no breakdowns by types of services funded. Actual enrollment figures were not available, and in most states, there was little information on completers, dropouts, and placements. Follow-up data were not available in any state. There were indications that some states recognized this problem and were taking steps to correct it. Sophisticated, computerized systems were being installed in several states, and in a few, program officers were reviewing the reporting requirements they impose on local education agencies and schools. For the most part, however, data necessary for monitoring and evaluating projects was seriously deficient at the state level.

Summary

The deficiencies of state level administration of the Part B set-aside program for the handicapped must be measured against the low cost of state level administration. One program officer in each state is expected to consult with advisory councils, enter into cooperative agreements with outside agencies, and plan, fund, and monitor a statewide program. Nevertheless, if additional staff were allocated for state level administration, the chances are that there would be fewer funds available for direct services to the handicapped. It could happen no other way, unless state agencies agreed to absorb the increased administrative costs, or unless interagency agreements made it possible for staff from several agencies (special education and vocational rehabilitation, for example) to aid in the administration of set-aside programs.

At the present time, however, state level administrators consider themselves solicitors and funders of projects; they do not consider themselves designers of statewide programs. Thus information needed for planning, monitoring, and evaluation is not a major concern of program officers charged with the responsibility of administering the set-aside program.

The Project Level Assessment

The purpose of the project level assessment was to examine the various ways local administrators identified handicapped individuals who qualified for the program and how they used screening techniques, assessment techniques, counseling, instructional methods, and overall approaches to the provision of vocational education to the handicapped. In addition, both at the state and local levels, the perceptions of administrators regarding "mainstreaming" (the integration of handicapped students with the non-handicapped), revenue sharing, and the overall value of the set-aside program were obtained. Finally, the attempt was made to identify local policies regarding educational services for the handicapped, and to document the extent of local planning for the set-aside program.

Definition of Project

For the purposes of this study, the term "project" was defined as a Part B set-aside grant to a school or local education agency for the purpose of providing specific educational services to the handicapped. Block grants to local education agencies for nonspecified services were not considered projects. Projects had identifying "project numbers," were designed to serve a stated number of handicapped students, and had time periods generally equal to those of the school year; e.g., September 1973 to June 1974. Projects were broken down in the following four categories:

(1) Regular: Handicapped students integrated into regular vocational education classes with non-handicapped students

(2) Special: Handicapped students enrolled in special classes for handicapped students only

(3) Combination: Handicapped students enrolled part of their time in special classes and part in regular classes, but who received extra support in the regular classes as well as the special

(4) Other: Programs for the development of curricula or the training of teachers and other personnel

Only the first three types of projects were considered in selecting the sample projects. No projects for curricula development or the training of teachers were included in the sample of 92 projects.

Statistical Overview

The search for statistical data at the local level was more successful than at the state level, but even at the local level, data considered critical to the assessment were not readily available. Researchers were forced to review enrollment and fiscal records, student rosters, and other information sources in the attempt to collect and tabulate such data as:

(1) Enrollment by handicapping condition

(2) Enrollment by sex and racial and ethnic background

(3) Enrollment by occupational offering

(4) Fiscal information, including local contributions

(5) Outcomes information, including dropouts, completers, and placements

(6) Follow-up data

The search was not always successful. Enrollment by handicapping conditions was not available for 20 percent of the 92 projects. Complete outcomes information was available for only twenty of the projects included in the representative subsample (74 of the 92 projects), and per-enrollee and per-completer costs could be computed for only 25 of the representative projects.

Nevertheless, the statistical overview revealed some interesting insights regarding the operation of the set-aside program in the nineteen states which were included in the representative sample. It should be remembered that the sample of 92 projects was divided into two subsamples: (1) 74 projects in nineteen states which were representative of all projects operating in those nineteen states; and (2) eighteen projects in three low enrollment states and California. Unless otherwise indicated, the statistical information presented below relates to the "representative" sample.

Mainstreaming: Nearly 70 percent of the projects included in the representative sample were categorized as "special," indicating that integration of the handicapped with regular students is still more a goal than a reality.

Work experience: Twenty percent of the projects were primarily work experience programs (that is, all or the majority of the students enrolled in these projects was placed in part-time jobs that were either related or unrelated to the instruction they were receiving in school). However, in an additional 30 percent of the projects, some students (usually a small minority) were referred to work experience classes. The quality of the work experience provided will be discussed in connection with the "Instructional Program."

Enrollment by handicapping condition: Approximately 77 percent of all students enrolled in the 74 representative projects were classified as "mentally retarded." Of these, 12 percent were classified as "trainable mentally retarded," fifteen percent were classified as "physically disabled," and the remainder were classified as follows: "learning disabled" (4 percent) and "seriously emotionally disturbed," "educationally handicapped," and "multihandicapped" (1 percent each).

National figures on the incidence of handicapping condition for school children between the ages of five and nineteen (1968-69) revealed that if the category "speech impaired" were eliminated from the total, 89 percent of the children were in the following categories: mentally retarded (35 percent), emotionally disturbed (31 percent), and learning disabled (15 percent). These three categories accounted for 85 percent of the enrollment in the 74 representative projects; however, the incidence of mental retardation in the set-aside program (77 percent) was much higher than the national incidence figures.

Enrollment by sex and racial and ethnic background: Approximately 60 percent of the students enrolled in the 74 representative projects were men, 55 percent were white, 37 percent black, and the remaining 8 percent Spanish-surnamed, Oriental, and American Indian.

It should be emphasized that none of the data summarized above was readily available to either project administrators or researchers. The data had to be processed on site by means of record searches and detailed questioning of project directors. Thus it seemed clear that problems relating to the accuracy and completeness of national and state data on the Part B set-aside program for the handicapped originated at the local level. The diverse methods used for funding projects, the lack of use of common definitions for key terms and handicapping conditions, and most important of all, the apparent lack of responsiveness at all levels to the need for monitoring and evaluation combined to create a management information system that was at best incomplete and at worst nonexistent.

This "lack of responsiveness" may have been due to the absence of resources necessary for the collection and processing of fiscal and program data; but irrespective of the reasons, it will probably take action at the federal level to improve the overall system. It is doubtful, however, that such action will be fruitful unless state and local administrators are consulted before improvements are instituted. The goal should be to aid local administrators in generating the kinds of information they need to maintain control over their programs. If the requirements of local administrators are satisfied and if local administrators understand the need for collecting complete and accurate data on their programs, it follows that state and national requirements will also be met.

Policy and Planning

Prior to the 1968 amendments, policy regarding education for the handicapped was not a primary concern of educators at either the state or local levels. Since the amendments, state and local education officials have been forced to devote some attention to the handicapped. Class action suits in behalf of the handicapped and universal education legislation in some states have increased the pressure on local and state educators to provide comprehensive educational services for the handicapped. Because of these developments, overall policy toward providing educational services to the handicapped, including vocational education, appears to be emerging. However, clearly articulated policies and coordinated planning have not yet occurred in most areas, although some local areas are more advanced than others.

One of the problems appears to be the fragmentation of educational agencies into special units, each with its own private line to funding sources at the state and federal levels. National vocational education administrators talk to state vocational education administrators, who in turn talk to their local counterparts. The same is true with special education, research divisions, and other units. The result is that vocational education programs for the handicapped are funded on an ad hoc basis, without policy and planning guidelines to aid those charged with initiating projects. While there can be no doubt that the resulting projects have been of benefit to the handicapped, most local education agencies have no way of knowing how many of their handicapped students are being served and the adequacy of the program mix.

Project Administration

The amount of Part B set-aside funds that were allocated to individual projects constituted a minor proportion of all funds administered by local education agencies and schools. Perhaps for this reason, it was relatively easy for local education agencies and schools to absorb the administrative costs of the Part B program. Certainly the vast majority of Part B set-aside funds, expended between fiscal years 1972-73 and 1973-74, were spent for direct services for the handicapped. This was one of the most positive findings of the project level assessment.

Allocation of resources: Data regarding the allocation of resources, by cost category, were collected for both school years 1972-73 (the base year) and school year 1973-74. Data regarding school year 1972-73 were presumably complete, whereas cost figures for school year 1973-74 (which was still in progress at the time the study took place) were "anticipated" cost figures. Nevertheless, comparisons between the complete 1972-73 fund allocations and anticipated 1973-74 allocations resulted in highly significant findings.

1. Both complete (1972-73) and anticipated (1973-74) cost breakdowns indicated that approximately 93 percent of all known funds allocated for the program were used to provide direct services to the handicapped.
2. In 1972-73, federal funds accounted for 74 percent of total expenditures; the corresponding figure for 1973-74 was only 58 percent, indicating that the Part B set-aside program had an accelerating effect on state and local contributions for vocational education programs for the handicapped.

Organizational structure: Part B set-aside programs were for the most part absorbed into the already existing organizational structures of the schools in which they took place. This is the major reason why the cost of administering the program was so low. On the other hand, the absorption of set-aside programs into traditional administrative structures tended to diffuse their special missions. The handicapped program was just another "special" program the schools had to administer. The amount of funds received by a single school to carry out a "project" constituted such a small percentage of all funds administered by the school (and were subject to year-to-year federal appropriations) that priority given to the handicapped program was generally no higher (and often lower) than priorities given to other programs administered by the schools.

Staffing: Personnel whose salaries were paid by set-aside funds were primarily instructors -- either vocational education instructors for skills training, or special education teachers for prevocational training. Funds were also spent for "evaluators" in diagnostic centers and for paraprofessionals and teachers' aides.

Use of nonproject staff and support: Most projects were self-contained; i.e., whatever services were provided to the students were provided by the projects themselves without help from outside organizations.

Staff training: In all projects included in the sample, staff training was accomplished informally. However, most school districts encouraged staff to attend university courses, state seminars, AMIDS programs, and other training opportunities, and provided released time for such training.

Relationship between vocational education and special education: One of the most significant findings of the administrative assessment was that the relationship between vocational education and special education at the local level was so close that it was often difficult to distinguish between them. Considering that the two agencies often appeared to be separate "Baltic states" at the state level, this came somewhat as a surprise. In hindsight, however, it became clear how the two grew so close together. First, the organizational relationship between the two agencies was quite different at the local level; both reported directly to the same superior -- the superintendent of schools -- and both were concerned with the implementation of actual programs. State and national administrators were once- and twice-removed from the "firing line," thus bureaucratic concerns were more apt to take precedence over program concerns. At the local level, both agencies found themselves mutually dependent upon each other. The result was that old differences began to disappear as both sought to provide services for handicapped students.

Reporting requirements: Considering the lack of program information available at the local level, it was not surprising that reporting requirements imposed on project administrators by principals and by local education agencies and state administrators were minimal. Usually the only reports required to the states were fiscal. Seldom were outcomes and follow-up reports required at any level. Thus whatever outcomes and follow-up records were kept depended solely upon the initiative of project administrators.

Issues: State and local administrators, project directors, counselors, and instructors were asked to comment on the following issues:

(1) The effect of the Part B set-aside funds on vocational programming for the handicapped

(2) What the effect of revenue sharing might be on programs for the handicapped

(3) The efficacy of integrating the handicapped with non-handicapped students

(4) Whether increased opportunities for work experience programs could be developed for the handicapped.

The latter two "issues" are discussed in more detail in the section on the instructional program below; the opinions of the educators interviewed on all four issues are summarized in this section.

1. Part B set-aside: Virtually all respondents (three state directors of vocational education dissented) maintained that without the set-aside program, vocational education for the handicapped would be for all intents and purposes nonexistent.

2. Revenue sharing: The consensus was that revenue sharing would have a negative effect on vocational programming for the handicapped. The

explanation was that entrenched special interest groups (most of whom represent nonminority groups -- or the loudest minorities) would see to it that funds that would otherwise have gone to the handicapped would be siphoned off for other purposes.

3. Integration of the handicapped: All but a few state administrators and two-thirds of the local educators interviewed said that it was the policies of their states and school districts to integrate the handicapped into regular classes. However, implementation was far from a reality. One of the major reasons cited for the lack of implementation was that it is easier to account for funds spent for "special" classes than it is for funds spent for "regular" classes. Other reasons cited were the reluctance or inability of teachers to accept (or teach) handicapped students, and the need of some handicapped individuals for special services that were not available in regular classrooms.

4. Work experience: The general consensus of all administrators interviewed was that work experience components should be initiated for the handicapped, and many school districts were astonishingly successful in promoting work experience situations for their handicapped students. The major constraints mentioned, which limited work experience components, were: (a) the reluctance of employers to hire handicapped individuals, and (b) the limited abilities of some handicapped students.

The Instructional Program

Judging from the results obtained from the 92 projects included in the project sample, there were wide variations in both the type and quality of projects funded throughout the country under the Part B set-aside legislation. The goals of programs included at least the following: diagnosis and assessment, prevocational training, provision of counseling services, acquisition of special equipment, and of course, skills training. The clientele ranged from the severely mentally retarded and emotionally disturbed to high-level (or borderline) educable mentally retarded individuals. The teaching techniques varied from rudimentary to highly sophisticated, and the training that teachers received in serving the handicapped ranged from nonexistent (for most vocational instructors) to graduate degrees in special education (for some special education personnel). Projects were regular, special, and a combination of the two and they were operating in depressed rural areas and suburban and urban areas with varying unemployment rates and industrial mixes. For example, the instructional content ran the gamut from a program in New York City to teach trainable mentally retarded students how to travel on the subway to a highly sophisticated skills training program in the suburbs of Detroit for students with several different types of handicaps.

Indeed the variations encountered in the field were so great that it was impossible to synthesize the 92 projects into categories of vocational programming for the handicapped, and in some ways, the overall program defied analysis -- statistical or otherwise. Nevertheless, some of the more important issues for the future were identified during the course of the assessment of the instructional program.

Selection and referral: The most important findings regarding the selection and referral process were as follows:

1. The evaluation and classification of students by handicapping condition generally occurred long before the students were referred into the vocational program.

2. Student aptitude assessments were occasionally (but not always) performed by vocational educators.

3. The most common sources of referrals for projects in comprehensive and vocational high schools were special education classes either in the high schools or in the elementary schools of the school districts. Students enrolled in "regular" classes were sometimes referred to the projects by instructors and/or guidance counselors, but they constituted a minority of the enrollment in the overall program. In institutions for the handicapped, students already enrolled were placed in the set-aside projects. Sheltered workshops enrolled students from institutions, special education classes, and in a few cases, youngsters who were not enrolled in schools, or students who had completed skills training programs but were not yet ready for outside employment.

4. The classification of students in mentally handicapped categories (except for trainable mentally retarded) was a source of tension to educators, students, and the general public. The use of IQ tests to measure mental retardation was being challenged in many areas by minority groups and their advocates. The trend was toward categorizing all handicapped students (as well as disadvantaged students) into a "special needs" category. (HR 69, which permits parents access to school records will probably cause an acceleration in this trend.)

5. In many areas, especially depressed rural areas, there was a tendency to ignore distinctions between "disadvantaged" and "handicapped" students.

It should be emphasized that most of the personnel interviewed in connection with the project level assessment were "project," or vocational education administrators and instructors. Their knowledge of the evaluation and diagnosis process was at best superficial. It was therefore not possible to assess the evaluation and diagnosis process in depth. However, regardless of how "special needs" students may be classified (handicapped, disadvantaged, and so on), those referred to the vocational program should undergo further assessments to determine aptitudes and educational needs. Such "aptitude assessments" -- which are a vocational education responsibility -- were not conducted in most projects.

Curriculum and teaching methods: Nearly all of the instructors who were interviewed expressed a theoretical commitment to individualized instruction, but as with "mainstreaming," that commitment had not yet been translated into action -- except to the extent that "hands-on" vocational training (which by its very nature is individualized) was practiced. The reasons for this discrepancy were that most classroom teachers did not have the time to develop their own material; nor did they have access to materials already developed. Why the latter is true was unclear, but it was seldom that state-developed curriculum materials were found at the project level. This lack of individualized instruction throughout the set-aside program may be one of the major reasons that despite policies to the contrary, handicapped students were placed for the most part in special rather than regular classes.

Occupational offerings: The definition of vocational education contained in the 1968 amendments is in part as follows:

> . . . vocational or technical training or retraining which is given in schools or classes (including field or laboratory work

> and remedial or related academic and technical instruction incident thereto) under public supervision and control or under contract with a state board or local education agency and is conducted as part of a program designed to prepare individuals for gainful employment or semiskilled or skilled workers or technicians or subprofessionals in recognized occupations (emphasis added).

This language indicates that vocational education for the handicapped means "skills training," or training for "gainful employment" in skilled, semiskilled, or technical positions. However, data taken from class enrollment figures for all 92 projects indicate that 63 percent of the handicapped students enrolled in set-aside programs were in nonskills training courses. Of these, 52 percent were enrolled in prevocational courses.

The "other than skills training" category includes, in addition to prevocational training, the following: mobility instruction, evaluation, travel training, sheltered workshops (other than as work experience stations), industrial arts, and tutoring. Nongainful home economic courses (mainly for women) included sewing, home cooking, and homemaking.

This raises the question as to whether set-aside funds were in most instances being used to fulfill the intent of the Act. For example, should nonskills training courses be financed with vocational education funds or with other funds appropriated for the handicapped? The answer to this question depends to a great extent upon the types of handicapped individuals who are referred into the program. If trainable mentally retarded individuals are referred to the vocational education program -- 12 percent of the total enrollment was classified as "trainable" -- skills training may not always be possible. The same is true with seriously educable mentally retarded students who were often enrolled in sheltered workshops, and to many students who were classified as seriously emotionally disturbed and learning-disabled.

These issues reflect an absence of planning at any level for overall educational services for the handicapped. It would seem that the first priority of the set-aside program should be to provide skills training for handicapped individuals who, although they may need special educational services to succeed in vocational education programs, were judged capable of competing on the open labor market with non-handicapped individuals. If vocational education were to serve this target group, other funds (special education funds, for example) could be used to provide nonskills training for those who are not, and never will be, capable of competing on the open labor market. However, if this were to happen, it would necessitate coordinated planning, from the local to the national level, involving such agencies as special education, vocational education, research and statistical units, vocational rehabilitation, and perhaps others. Such planning was not taking place in most of the areas visited in conjunction with the project level assessment.

The courses in the 92 projects ranged over the entire spectrum of vocational education offerings, but the largest numbers were in the trade and industrial category (primarily male), home economics (primarily female), and prevocational (primarily younger students). As in other programs, the range of training was considerably wider for men than for women. Most female students were enrolled in home economics, health occupations, and prevocational training. The remainder was scattered throughout distributive education and office and clerical classes. Of course, the number of occupational offerings included in the trade and industrial category is much larger than the number of occupations in the home economics and health occupations categories. This factor, more than any other, accounted for the wider range of occupational training for men.

Work experience: Approximately 25 percent of the students enrolled in the 92 projects were in work experience programs; that is, they spent part of their time in school and part of their time on a job. However, only one of the 92 projects was a cooperative program; that is, the work the students were performing on the job was related to the instruction they were receiving in the classroom. Most of the jobs being performed by handicapped students were "work experience" or "income maintenance" positions; they were not related to the instruction they were receiving in the classroom. Many of the work stations were in sheltered workshops, and most of those in private firms were jobs requiring limited skills.

Mixing the handicapped with the disadvantaged: There was a trend, especially in rural areas, to mix the handicapped and the disadvantaged in the same classes. Some administrators justified this on the ground that if they did not mix the two together, there would not be enough students in either category for the school to qualify for state grants. However, in most cases, the educational needs of the two groups were quite different, and in almost every case, there was no doubt that those classified as disadvantaged resented being placed in classes with those categorized as mentally retarded. This was especially true in large cities where the disadvantaged were members of minority groups and the mentally retarded were not. If both the disadvantaged and handicapped were referred to "regular" classes, there was no problem; but where they were grouped together in "special" classes, the atmosphere -- for the disadvantaged at least -- was not conducive to learning.

Guidance and counseling: Only a few of the larger projects paid for guidance and counseling personnel from project funds. Most students enrolled in the set-aside program had other school attachments and, theoretically at least, had access to the regular school guidance and counseling staff. Within projects, project directors and work experience coordinators were most likely to serve as surrogate counselors. The instructors of special classes and prevocational courses were more likely to deal with the individual problems of their students than the instructors of regular classes.

Equipment and materials: The quality of equipment and materials did not appear to be a major concern to most project personnel. Most rated available equipment as "adequate" or better. This may be due to the fact that the majority of students was in the educable mentally retarded category and used the same equipment provided for regular classes. Most physical and sensory handicapped students were enrolled in institutions, which in most cases, were excellently equipped to deal with specific handicaps.

Program costs and outcomes: Program costs could be calculated for 25 of the representative projects, and outcomes information was available for twenty of the representative projects. The cost information for the 25 projects is as follows:

Category	Number	Cost
(1) Total enrollment:	2,749	
(2) Total completers:	1,456	
(3) Total combined costs (federal, state, and local)		$3,491,001
(4) Total federal costs		1,268,090
(a) Combined costs per enrollee		1,270
(b) Federal costs per enrollee		462
(c) Combined costs per completer		2,398
(d) Federal costs per completer		871

Outcomes information: Of the 2,009 students enrolled in the twenty projects for which outcomes information was available, only 6 percent dropped out, 57 percent completed, and 48 percent of the completers were placed in jobs, 58 percent of which were training related. Approximately 33 percent of the completers reenrolled in regular vocational education programs or in other training.

Because of the sparsity of outcomes information, it was not possible to compare completer or placement rates by type of training received; nor was it possible to compare the costs of various types of programs. However, the case study interviews (summarized in the next section) indicated that work experience completers earned more in the jobs they obtained than those who were not in work experience programs. The employer interviews indicated that one of the major constraints limiting the expansion of work experience programs is that many employers believe that if they hired the handicapped, they would have to make major changes in their work environments.

Case Study Interviews

The case study interviews indicated that both students and parents expressed extremely favorable attitudes toward the projects in which they or their children were enrolled. If one judges solely in terms of expressed attitudes, the Part B set-aside program for the handicapped appeared to be a success.

1. Student assessment: Student evaluation of the program was fundamentally good. Most liked the training they received and the people with whom they associated. They found that tools and equipment were not too hard to operate, classes were not boring, and the environment was generally favorable in terms of teachers, classmates, and working conditions.
2. Parent assessment: Of the parents interviewed, 76 percent rated the programs either "excellent" or "good." Two out of three parents perceived their children as having improved in the areas of self-reliance, self-image, and social mixing ability since the children had begun participating in the program.

Because of the absence of a control group, it was impossible to determine whether the project participants interviewed were more successful in finding jobs than their handicapped counterparts who did not participate in the program. Nevertheless, the outcomes information appears to be favorable:

1. Four out of ten completers who were still enrolled in school were employed.
2. Six out of ten completers who were no longer in school were employed.
3. The average wage received by completers out of school was $2.17 an hour; the corresponding figure for completers in school was $2.07 an hour.

4. Of the employed completers, 70 percent were in service occupations (41 percent), miscellaneous occupations (18 percent), and clerical and sales (11 percent).
5. Eighty-four percent of the completers were employed in the following industries: miscellaneous service (36 percent), trade (20 percent), government (14 percent), and manufacturing (14 percent).
6. Work experience students earn more than those not enrolled in this type of program, although the placement rates for the two groups are about the same.

Participating employers expressed favorable attitudes toward the program. Three out of four participating employers rated the performance of handicapped students and/or completers "as good" or "better than" regular workers in each of eight performance scales.

Nonparticipating employers were not quite so disposed to be in favor of the program as their participating counterparts:

1. Of the nonparticipating employers, 52 percent had negative feelings about participating in the program.
2. When compared to participating employers, nonparticipating employers were more likely to believe that hiring handicapped individuals would require significant changes in their business environments.
3. Sixty-one percent of the nonparticipating employers had heard of the program and 14 percent had previously participated in it.
4. Only sixteen out of a total of 71 nonparticipating employers had been directly approached and refused to participate.

The interviews also revealed some interesting attitudes on the part of students toward different types of programs. For example, students in regular classes were more apt to express favorable opinions regarding their relationships with teachers and classmates, yet they were more apt to be bored than students in special classes. Students in sheltered workshops expressed above-average dislike for "working conditions," instructors (or supervisors), and their fellow students (or workers). The percentage of sheltered workshop students who could find nothing good to say about their programs (10 percent) was twice as high as for participant sample as a whole. Yet students in sheltered workshops were less apt to be bored than their counterparts in other classes. Finally, students in state institutions expressed above-average dislike for their programs.

Conclusions of the Assessment

As was stated in the introduction to this report, the study conducted by ORC was an assessment not an evaluation of the Part B set-aside program for the handicapped. Yet it is inevitable that the study's conclusions contain, or at least imply, value judgments, some of which are favorable to the program and some of which are not. We have therefore attempted to bolster the conclusions summarized below with as much hard data as possible. Nevertheless, we recognize that some of the issues raised by the study are not only complicated, but emotion-packed, and that they do not lend themselves to easy solutions. It is our hope that the findings, conclusions, and recommendations of the assessment will be of use in improving a program which already has proved its value in making available new educational opportunities to handicapped students throughout the country. The conclusions are arranged in four categories: general, administrative, program, and issues.

General

Nearly four hundred administrators, instructors, and other staff were interviewed in conjunction with this study. The almost unanimous opinion of the respondents was that without the Part B set-aside legislation, there would be very little vocational programming for the handicapped in any state. This opinion was supported by hard statistical data.

Effect of the Part B Set-Aside Concept

Fiscal year 1973 data reported by the states to the U. S. Office of Education indicated that in seventeen states there were no differences between total vocational education expenditures for the handicapped and total expenditures under the Part B set-aside. In all but a few states, the differences were not significant. Data from the project level assessment show that during school year 1972-73, federal funds accounted for 74 percent of all funds (federal, state, and local) spent on set-aside programs. Equally significant, during school year 1973-74 the percentage of federal expenditures for set-aside programs dropped from 74 to 58, indicating that the set-aside program may be having an accelerating effect on state and local contributions to vocational education programs for the handicapped.

Do Set-Aside Funds Reach the Handicapped?

An analysis conducted of the allocation of set-aside funds, by cost categories, indicated that in both school years 1972-73 and 1973-74, the vast majority of set-aside funds was used to provide direct services to the handicapped. Of these funds, 93 percent was used to hire staff who work directly with handicapped students or who purchase equipment, materials, and supplies. Only 7 percent was used for administrative purposes.

Program Constraints

Both state and local administrators cited the lack of trained staff and the reluctance of instructors in regular classes to accept the handicapped as the major constraints limiting the expansion of vocational education programs for the handicapped. However, it is obvious that if the set-aside program were to be discontinued, the number of vocational training opportunities for the handicapped would suffer a drastic decrease. In other words, "lack of funds," or the reluctance to spend funds for vocational programming for the handicapped, may be the major constraint limiting expansion of vocational education programs for the handicapped.

Overall Performance

Costs and outcomes data were seriously deficient at both the state and local levels. However, according to what little data were available and to the results of the student, parent, and employer interviews, the program appeared to be working well. Costs per student and completer were not excessive, and placement rates ranged from 48 to 60 percent for completers. Considering that about 33 percent of the completers reenrolled in school, one can see that the placement rate was good. Only 15 percent of the completers were unemployed, and the dropout rate, at 6 percent, was very low. It should be emphasized, however, that costs and outcomes analyses were possible for only about a third of the projects included in the representative sample.

Both parents and students were favorably impressed by the program, and participating employers gave their handicapped employees high ratings in almost every work performance category.

Administration

The administrative aspects of the program are discussed below.

Policy

Clear and articulate policy issuances directed toward providing comprehensive educational services for the handicapped, including vocational education, were lacking at both the state and local levels. Because of the enactment of the set-aside program, right-to-education suits, and universal education legislation in some states, state and local education agencies were becoming more aware of their responsibilities toward the handicapped. Yet most states and local education agencies were reacting to these developments, rather than acting to create comprehensive educational programs for the handicapped. What are needed most are policy issuances directing the various educational divisions with responsibility for the handicapped to work together in creating such programs. The fragmentation of educational agencies into special units, each with its own private line to funding sources at the state and federal levels, is one of the major inhibitors to comprehensive educational programming for the handicapped. It is unrealistic to expect divisions of vocational and special education to initiate such policies. They must emanate from the highest levels of the educational hierarchies.

Planning

It would be an exaggeration to state that no planning takes place at the state and local levels; but it is accurate to maintain that what planning does take place is of a short-term nature, generally directed toward justifying certain projects. It would be unfair to place the blame for lack of planning solely on vocational education administrators. It is the responsibility of vocational education to provide a specific kind of educational service to all who are referred to the vocational education program -- handicapped and non-handicapped; it is not the responsibility of vocational education to identify,

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assess, and recruit all handicapped individuals coming up through the educational system who should be placed in vocational education programs. Thus if long-range plans are to be launched to provide comprehensive educational programs for the handicapped, including vocational education, pertinent divisions of educational agencies -- at both the state and local levels -- must work together.

There was little evidence of this kind of cooperation at either the state or local levels. When asked about the universe of need, or the establishment of priorities, most respondents expressed bewilderment. "Planning," if it can be called that, consisted mainly of state program officers soliciting project proposals from local administrators. At the local level, it generally consisted of vocational educators getting together with special educators to determine what kinds of projects should be funded and what types of students should be referred to the projects. The object was to spend the funds (Part B set-aside funds) available from the states. While there can be no doubt that the resulting projects were of benefit to the handicapped, most states and local education agencies had no way of knowing how many of their handicapped students were being served or if the program mix was adequate.

Monitoring and Evaluation

Monitoring and evaluation depend to a great extent on the collection and tabulation of hard statistical data. They also depend on the presentation of such data in a form that is readily understandable to project administrators. Adequate management information systems were extremely rare at both the state and local levels. In many cases, important information was buried in files, but it was seldom that such information was processed for management purposes. In addition, common definitions for such terms as "handicapping condition" and "completer" were not used; nor were local administrators aware of sources (federal and state) from which project funds were obtained. Complete enrollment, fiscal, and outcomes information was not available from any state and from only a handful of projects. Little attempt was made to collect follow-up information. Much of the program and fiscal data reported by the states to the Office of Education were either incomplete or inaccurate. The lack of adequate management information, together with other weaknesses which will be discussed in subsequent sections, resulted in poor monitoring and evaluation at the state and local levels.

Funding Procedures

Monitoring and evaluation also depend upon whether measurable goals are set for programs and whether performance standards are established. Proposals for grants from local education agencies to the states should contain such goals and performance standards. In states which provided block grants to local education agencies, no such goals or standards existed, and the states had very little control over local programs. In the majority of states which funded "projects" on the basis of proposals submitted by schools and local education agencies, goals and standards generally existed, although in many cases, the goals stated were too general to be measurable. Fiscal accountability was much better in states which funded projects. In the block grant states, local administrators did not apply funds from various sources against expenditures until after the close of the school or fiscal year. Thus the use of set-aside funds became a bookkeeping rather than a program responsibility.

Special note should be made of the following:

1. A few states have devised methods for the joint funding of projects with other agencies -- agencies both inside and outside the educational establishment --

without violating regulations against the co-mingling of funds. Since co-mingling is often mentioned as a constraint limiting joint funding, the accounting methods used by these states should be disseminated to all state program officers.

2. Several states employ the "seed money" concept in funding projects; that is, set-aside funds are granted to local education agencies only on condition that over a period of time the projects will become 100 percent supported by local funds. The results of the seed money concept, if its proves successful, could have significant implications for the set-aside program.
3. One of the most often mentioned constraints limiting the funding of regular projects (projects which integrate the handicapped with non-handicapped students) is that it is too difficult to prove that such funds are used exclusively to purchase services for the handicapped. Yet several states as a matter of policy fund only regular projects and have no difficulty accounting for the use of set-aside funds. The techniques used by such states should also be disseminated to all state program officers.

Organization

Primarily because the Part B set-aside program has been absorbed into existing administrative structures at both the state and local levels, the administrative cost of the program has been low. Although this is a positive finding, it has its negative aspects. Many of the administrative responsibilities mandated in the 1968 amendments were not performed, and state program officers became solicitors and funders of projects rather than designers of state programs. Priorities given to set-aside projects at the local level were generally no higher (and often lower) than priorities given to other programs.

Program

Four program components -- curriculum development, teacher training, occupational offerings, and work experience -- are discussed below.

Curriculum Development

Almost all instructors interviewed expressed a theoretical commitment to individualized instruction, but in most areas that commitment had not yet been translated into action -- except to the extent that "hands-on" vocational training (which by its very nature is individualized) was practiced.

Most projects in states which successfully implemented policies directed toward "mainstreaming" the handicapped (that is, placing them in regular classes with the non-handicapped) used individualized instruction techniques and advanced curricula. Thus the failure to effect mainstreaming in most areas may be partially due either to the nonuse of existing curriculum materials or the lack of such materials.

Teacher Training

One of the most often mentioned constraints limiting the expansion of vocational education programs for the handicapped was the reluctance of teachers in regular classrooms to accept the handicapped, or the inability of teachers to instruct handicapped students. Thus teacher training in special education techniques was considered a necessity, not only to help effect program expansion, but also to improve program quality.

Occupational Offerings

Two-thirds of the training provided under the set-aside program was nonskills training, that is, training not intended to prepare students to compete in the open labor market in any given skill, craft, or trade. Half of the students enrolled in this type of training were in prevocational courses. Others were enrolled in diagnostic centers, mobility training, nongainful home economics, industrial arts, tutoring, and sheltered workshops.

Of those enrolled in skills training, the vast majority was in trade and industrial courses, mainly for men. The range of occupational offerings for women was extremely narrow, being confined mainly to home economics (much of which was not gainful) and health occupations.

Work Experience

In half of the projects included in the project sample, at least some students were referred into work experience programs. Approximately 30 percent of the projects were classified as Part B "work experience" programs (all students in such programs were receiving work experience of some kind). However, Parts G and H programming for the handicapped was minimal, and in most instances, the work stations to which handicapped students were assigned were not related in any way to the instruction they were receiving in school, were unskilled in nature, and were intended mainly to provide students with "work experience."

Unlike participating employers, nonparticipating employers expressed the belief that it would be necessary to effect radical changes in their working environments if they were to hire the handicapped. State and local administrators cited the reluctance of employers and the limitations of some handicapped students as the major constraints limiting the expansion of work experience programs for the handicapped. An additional constraint may be that too little is done at the state and local levels to promote employer participation in vocational education programs for the handicapped.

Issues

Approximately 15 percent of those enrolled in the set-aside program were classified as trainable mentally retarded, seriously emotionally disturbed and learning disabled. In addition, many of those classified as educable mentally retarded were borderline trainables. One of the reasons why so much of the training provided under the Part B set-aside was of the nonskill type was that many of the individuals referred into the program did not have the capacity to participate in advanced skills training programs. Some states concentrated on the younger handicapped students, which explains why so much of the programming was prevocational.

Program Priorities

Many administrators throughout the country voiced the opinion that trainable mentally retarded students and other handicapped individuals who, according to medical and psychological diagnoses, will never be able to compete on the open labor market, should not be referred to the set-aside program. A few states established policies which, in effect, barred the placement of such individuals in vocational education programs. The question is one of priorities. If one considers that funding for the handicapped comes from many different sources and that groups of handicapped individuals have varying educational needs, the question arises: Which funds should be used to provide which services? The consensus was that the first priority for the set-aside program should be those handicapped individuals who, although they may need special services to succeed in a vocational education program, nevertheless have the capacity to compete on the open labor market in certain occupational areas. With respect to prevocational programming for younger students, the prevocational training should be tied into, or lead to,

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ter skills training. Because of the absence of policy and planning at both the state and local levels, priorities for the set-aside program generally were not established.

Mainstreaming

Approximately two-thirds of the local administrators who were interviewed said that it was the policy of their school districts to integrate the handicapped with regular students. Twenty reported no policy in this area, and eleven said that they did not know whether such a policy existed. However, in most areas where the policy called for integration, implementation was still far from a reality. Of the students enrolled in the program, 70 percent were in "special" classes. As noted previously, there were several reasons for lack of implementation: (1) reluctance of instructors to accept handicapped students, (2) inability of instructors to teach the handicapped, (3) lack of individualized instruction techniques in most projects, and (4) referral (into the program) of individuals who could not succeed in advanced skills training classes (trainable mentally retarded students, for example).

However, there is also the question: Is integration always the best policy? There appears to be a real danger that handicapped students will become lost in regular classes, or that they will not receive the special support they need from instructors and students of regular classes. One of the findings of the student interviews supports this contention, that is, that students in regular classes were more apt to become bored than students in special classes. There were numerous examples of special projects wherein handicapped students received vital support from both their fellow students and their instructors. Perhaps the answer is "combination" projects, similar to those often funded in Michigan, Wisconsin, and Minnesota. Students in combination projects spent part of their time in special classes and part in regular classes, but they received extra support in both the special and regular components.

Diagnosis and Assessment

Diagnosis of handicapping condition was not a vocational education responsibility. Nevertheless, the classification of students into mentally handicapped categories was encountering difficulties throughout the country. The use of IQ scores to classify students as mentally retarded was being challenged in many areas, especially by minority groups. The trend in many states and local areas was to discontinue categorizing students by specific types of handicaps and, instead, to place all handicapped individuals in the "special needs" category.

This trend makes it incumbent on vocational education to perform educational assessments of the special needs students who are referred for training. Thorough educational assessments, including individualized education plans, by vocational education were performed in only a small minority of the sample projects.

Mixing the Handicapped and Disadvantaged

In smaller schools, no attempt was made to separate educable mentally retarded students from the disadvantaged, and in some of the larger schools, disadvantaged students were placed in special classes with the mentally retarded. Since the educational needs of the disadvantaged and handicapped are usually different, and since the disadvantaged, understandably, were often humiliated by being placed in classes with the mentally retarded, the mixing of the mentally handicapped with the disadvantaged is indeed a questionable practice.

Revenue Sharing

Most state and local administrators said that revenue sharing would have a negative effect on vocational education programs for the handicapped and on vocational education in general. The consensus was that entrenched special interest groups would see to it that funds that otherwise would have gone to the handicapped would be siphoned off for other purposes.

Recommendations

Based on the conclusions summarized above, we offer the following recommendations:

1. Extension of the Part B set-aside: Despite administrative and program deficiencies, the Part B set-aside program has proved its worth in making available new educational opportunities to handicapped students, and it should be continued.

a. Set-aside for all special-needs students: Set-aside provisions for the handicapped and for the disadvantaged should not be combined. The educational needs of the handicapped and the disadvantaged are usually different and should be considered separately. Moreover, if the two categories are combined, there would be no assurance that the states would allocate funds to the two groups on a proportional basis. Therefore, one of the two groups would suffer a paucity of programming in some areas.

b. Monitoring the set-aside provisions: There is evidence that some states may not be expending 10 percent of their basic grants on programs for the handicapped. The U.S. Office of Education should monitor this situation closely.

2. Teacher training and retraining: There are few persons who have been trained in both special education and vocational education. There is a need for undergraduate teacher education programs which will produce individuals qualified in both fields. Graduate programs for training vocational education teachers in special education and vice versa are also needed. Both types of programs should require internships in Part B projects.

3. Instructional systems for the handicapped: Research in the area of instructional systems for the handicapped is urgently needed. Basic, applied, and comparative research in this area will give a needed boost to instructional technology as it applies to the handicapped. Many teachers and employers suggest that their unwillingness to work with handicapped students is related not only to their lack of knowledge regarding "how to" teach or supervise, but to a greater lack of societal knowledge regarding the needs, learning styles, and cognitive structures of persons with special needs. This research should relate directly to or take place in Part B programs.

4. Promotion of coordinated educational programs for the handicapped: Consideration should be given to providing some states with grants for pilot programs directed toward accomplishing coordinated, interagency policy making, planning, monitoring, and evaluation of all educational programs for the handicapped, including vocational education. Such programs should include identifying the universe of need in local areas and for the state as a whole, identifying funds from all sources available to meet those needs, establishing priorities based on needs and available funds for each type of program, and establishing management information systems for monitoring and evaluation purposes.

5. Dissemination of information: The U.S. Office of Education should collect and disseminate to the states information of value in administering the Part B set-aside program. The methods used by some states to effect joint funding of projects, account for funds used in financing regular projects, and incorporate the "seed money" concept are examples of information that should receive wide dissemination throughout the states.

6. Improvement of data collection systems: The U.S. Office of Education, in consultation with state and local educators and administrators, should take action to

improve local and state data collection systems. The Office of Education should be particularly concerned with the quality of information on the Part B set-aside program for the handicapped that is reported to the federal government by the states. However, improvement of data collected by the states depends to a great extent on the quality of data collected at the local level. The emphasis, therefore, should be on the data local administrators need to maintain control over their programs.

7. Curriculum development: Curricula for skills training, which would incorporate individualized instruction techniques, are necessary if handicapped individuals are to be integrated into classes with the non-handicapped. Although a great deal of such material has been developed, it is not widely used. Evaluations of existing material should be made, and efforts should be made at the state level to promote the use of superior curricula materials in Part B set-aside projects. In some areas, technical assistance to project instructors may be necessary. The states should be prepared to provide such technical assistance.

8. Program mix: The amount of skills training provided under the set-aside program should be increased, and all prevocational programs should be tied into later skills training. Individual education plans should be developed for each student referred into the set-aside program. Such plans should be directed toward providing comprehensive educational services, both nonskills and skills training, for handicapped individuals enrolled in the vocational education program.

9. Occupational offerings for women: The range of occupational offerings for women in the set-aside program is very narrow. States should take action to widen the occupational offerings available to women, including those in the trade and industrial area.

a. Home economics: State guidelines for home economics courses should be reviewed to make certain that such courses do not preclude either work or laboratory experience because of the few hours per week students spend in home economics courses. Many of the home economics courses in which set-aside students were enrolled appeared to lack laboratory and/or work experience. As a result, they were listed in the "nongainful" home economics category; the program did not seem to be preparing students for "gainful employment in a recognized occupation."

10. Work experience: Consideration should be given to allocating portions of Parts G and H set-asides for the handicapped. Programming for the handicapped under Parts G and H was for all practical purposes nonexistent.

a. Employer promotion: Aggressive campaigns to promote participation by employers in Part B set-aside programs should be launched at both the national and state levels. Employers who are now participating in the program should be enlisted to help in these campaigns. The keynote should be to break down the biases of employers who believe that the employment of handicapped individuals would cause wholesale changes in their working environments or that supervision of the handicapped would be difficult. The results of the employer interviews show that such changes are not necessary and that handicapped workers receive high ratings from participating employers in all performance categories. Use should be made of this information.

11. Enrollment priority: Priority for enrollment in the set-aside program should be given to those handicapped individuals who, after training, can compete in the open labor market in certain occupational areas. Funds from other sources should be used to

provide educational services for individuals who are unlikely to be able to compete on the open labor market or who are unable to benefit from advanced skills training. Of course, periodic reassessments should be made of all handicapped individuals to make certain that those who make educational advances are not locked into set and never-changing programs. Furthermore, if all in the priority target population is enrolled in a given state or area, and all set-aside funds have not been spent, projects for the more severely handicapped, or those who may require services over a longer period of time before they can become competitive, should be instituted.

12. Educational assessments: Although it is not a responsibility of vocational education to diagnose and classify individuals by handicapping condition, it is a vocational education responsibility to perform thorough educational assessments of handicapped students who are referred into the program. The states should require that such assessments be made for all special needs students who are referred to the vocational education program.

245/246

APPENDIX

TABULATIONS OF PARTICIPANT AND PARENT DATA

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TABLE A-1

CHARACTERISTICS OF STUDENT POPULATION

	BASE•	AGGREGATE (%)	ILLINOIS		OHIO		NORTH CAROLINA		TEXAS		NEW JERSEY	
			BASE	(%)	BASE	(%)	BASE	(%)	BASE	(%)	BASE	(%)
Student Status												
Program Completer	(321)	32	(69)	35	(95)	48	(22)*	11	(64)	32	(71)	36
Current Student	(680)	68	(131)	66	(105)	53	(178)	89	(137)	69	(129)	65
Type of Classroom												
Regular	(245)	25	(134)	[illegible]	(62)	31	(0)*	0	(3)*	1	(6)*	3
Special	(484)	48	(10)*	5	(22)*	11	(200)	100	(156)	78	(96)	48
Sheltered Workshop	(207)	21	(3)*	2	(69)	35	(0)*	0	(37)*	18	(98)	49
Job	(65)	7	(33)*	17	(27)*	14	(0)*	0	(5)*	3	(0)*	0
Type of Handicap												
Mental	(909)	91	(122)	61	(188)	94	(199)	100	(200)	100	(200)	100
Physical/Sensory	(92)	9	(78)	39	(12)*	6	(1)*	1	(1)*	1	(0)*	0
Sex												
Male	(609)	63	(115)	61	(114)	58	(133)	70	(121)	63	(126)	64
Female	(353)	37	(73)	39	(82)	42	(57)	30	(70)	37	(71)	36
Ethnic Background												
White	(362)	38	(109)	58	(92)	47	(21)*	11	(92)	50	(49)*	25
Black	(493)	51	(74)	40	(100)	51	(169)	88	(37)*	20	(114)	59
Spanish Speaking	(98)	10	(5)*	3	(4)*	2	(0)*	0	(55)	30	(31)*	16
Age												
21 and Older	(36)*	4	(4)*	2	(7)*	4	(9)*	5	(16)*	10	(0)*	0
19-20 Years Old	(221)	[illegible]	(59)	30	(89)	46	(45)*	22	(51)	32	(18)*	9
17-18 Years Old	(357)	37	(100)	53	(72)	37	(89)	46	(60)	38	(47)*	24
15-16 Years Old	(190)	19	(31)*	15	(33)*	16	(50)	26	(31)*	19	(59)	31
14 and Younger	(80)	8	(13)*	7	[illegible]	3	(3)*	2	(1)*	1	(69)	36
Type of Program												
Work Experience Component	(231)	23	(86)	[illegible]	(0)*	0	(0)*	0	(86)	43	(112)	56
Other	(747)	[illegible]	(114)	[illegible]	(200)	100	(200)	100	(115)	57	(88)	44

*Small cell size; interpret with caution

•Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-response.

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TABLE A-2

CHARACTERISTICS OF RESPONDENT HOUSEHOLDS

	BASE*	PROPORTIONAL DISTRIBUTION (%)
AGGREGATE	(1001)	100
Size of Household		
1-3 People	(162)	16
4 People	(161)	16
5 People	(143)	15
6 People	(128)	13
7 People or More	(291)	29
Source of Family Income		
Own Wages	(450)	45
Wages of Others in Household	(489)	49
Investments (interest, dividends)	(33)	3
Social Security	(170)	17
VA Pensions	(49)	5
Unemployment Insurance	(31)	3
Workmen's Compensation	(16)	2
Public Welfare	(236)	24
Rent from Roomers or Boarders	(41)	4
Farm Income	(59)	6
Other	(73)	7
Occupation of Parent		
Professional/Technical/Managerial	(82)	8
Clerical/Sales	(53)	5
Service	(153)	16
Farm/Fishery/Forestry	(32)	3
Processing	(16)	2
Machine Trades	(21)	2
Benchwork	(35)	4
Structural Work	(22)	2
Misc. Occupations	(41)	4
Housewife	(452)	46
Retired/Disabled	(25)	3
Unemployed	(16)	1
Condition and Type of Neighborhood		
Excellent	(106)	11
Good	(235)	24
Fair	(263)	27
Poor	(310)	32

*Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-responses

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TABLE A-3

TYPE OF CLASSROOM VOCATIONAL TRAINING WAS RECEIVED IN

		TYPE CLASSROOM			
	BASE$^+$	REGULAR (%)	SPECIAL (%)	SHELTERED WORKSHOP (%)	JOB (%)
AGGREGATE	(1001)	25	48	21	7
State		***	***	***	***
Illinois	(200)	63	2	1	51
Ohio	(200)	34	5	33	42
North Carolina	(200)	0	41	0	0
Texas	(201)	1	32	18	8
New Jersey	(200)	2	20	47	0
Age		***	***	***	***
21 and Older	(36)	2	5	2	5
19-20	(271)	45	23	13	45
17-18	(337)	25	38	33	42
15-16	(190)	18	20	23	2
14 and Younger	(80)	2	5	23	2
Ethnic Background					
White	(362)	54	31	33	42
Black	(493)	45	57	47	49
Spanish	(98)	2	11	19	8
People in Household		***	***	***	***
1-3 People	(162)	20	15	13	23
4	(161)	26	10	18	19
5	(143)	14	15	14	16
6	(128)	10	13	16	16
7 or More	(291)	26	29	35	27
Public Welfare		***	***	***	***
Yes	(236)	18	23	33	25
No	(653)	79	60	63	75
Sex					
Male	(609)	62	63	67	59
Female	(353)	38	37	33	42
Type of Program		***	***	***	***
Work Experience	(254)	24	16	54	8
Other	(747)	76	84	46	92

***Chi square significant at .01 level

+Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-responses

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TABLE A-4

HOW THE STUDENT FIRST HEARD OF VOCATIONAL EDUCATION PROGRAM

	BASE*	SCHOOL/ GENERAL (%)	PRINCIPAL/ COUNSELOR (%)	TEACHER/ GENERAL (%)	RELATIVES/ FRIENDS (%)	OWN SELECTION (%)	ASSIGNED/ TRANS-FERRED (%)	GENERAL (%)	DIDN'T KNOW ABOUT PROGRAM (%)
AGGREGATE	(962)	21	20	22	9	2	11	7	1
Student Status									
Program Completer	(307)	22	21	19	11	1	11	8	2
Current Student	(655)	21	20	24	8	2	11	7	1
Type of Classroom									
Regular	(231)	20	26	20	15	0	4	4	4
Special	(465)	18	19	22	8	3	14	8	0
Sheltered Workshop	(201)	26	16	25	6	1	15	8	1
Job	(65)	32	25	22	6	0	2	11	0
Type of Handicap									
Mental	(880)	21	20	22	9	2	12	8	1
Physical/Sensory	(82)	23	27	23	12	0	2	4	2
Sex									
Male	(609)	22	20	21	8	2	13	6	1
Female	(353)	20	20	24	10	1	8	9	2
Ethnic Background									
White	(362)	14	20	20	13	2	12	8	1
Black	(493)	24	21	25	5	2	10	7	2
Spanish Speaking	(98)	33	19	15	16	0	7	4	0
Age									
21 and Older	(34)*	24	15	15	15	3	0	9	0
19-20 Years Old	(262)	19	20	25	12	1	7	9	2
17-18 Years Old	(319)	15	25	25	8	2	10	8	0
15-16 Years Old	(189)	24	20	25	9	3	13	2	2
14 and Younger	(79)	51	4	15	3	1	20	5	1
State									
Illinois	(188)	20	32	21	14	1	3	1	1
Ohio	(196)	21	16	31	7	0	4	12	4
North Carolina	(190)	10	30	27	5	5	11	8	0
Texas	(191)	13	19	16	14	3	12	9	1
New Jersey	(197)	42	5	16	5	1	24	6	0
Type of Program									
Work Experience Component	(236)	35	19	16	11	1	9	5	0
Other	(726)	17	21	24	8	2	11	8	2

*Small cell size--Interpret with caution

+Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-responses

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TABLE A-5

HOW PARENTS FIRST HEARD ABOUT THE VOCATIONAL EDUCATION PROGRAM

		FIRST HEARD ABOUT PROGRAM - COLLAPSED CATEGORIES						
	BASE+	SCHOOL/ EDUCATORS (%)	CHILD (%)	RELATIVES FRIENDS (%)	WAS EMPLOYEE (%)	GENERAL (%)	WAS TRANS-FERRED (%)	WASN'T TOLD/ DK (%)
AGGREGATE	(989)	49	19	6	4	8	3	5
Student Status								
Program Completer	(315)	51	16	6	4	8	4	5
Current Student	(674)	48	21	6	5	8	2	5
Type of Classroom								
Regular	(239)	41	31	8	2	4	0	8
Special	(479)	42	19	6	7	11	3	5
Sheltered Workshop	(207)	65	9	4	1	9	3	4
Job	(64)	75	11	5	0	0	5	0
Ethnic Background								
White	(360)	49	18	6	7	9	2	3
Black	(484)	48	22	6	3	8	3	6
Spanish	(97)	53	12	4	1	9	6	5
Age of Student								
21 and Older	(36)	36	8	14	8	11	0	6
19-20 Years Old	(271)	46	24	7	4	6	2	6
17-18 Years Old	(337)	48	21	5	2	9	4	4
15-16 Years Old	(190)	53	23	6	2	4	3	5
14 and Younger	(80)	65	9	0	1	18	1	5
State		***	***	***	***	***	***	***
Illinois	(194)	49	29	8	2	2	1	4
Ohio	(199)	58	19	5	1	3	1	8
North Carolina	(196)	37	34	7	2	8	2	7
Texas	(200)	38	8	11	17	13	3	1
New Jersey	(200)	62	8	1	0	15	7	6
Type of Program		***	***	***	***	***	***	***
Work experience Component	(248)	58	19	3	1	11	3	3
Other	(741)	46	19	7	5	8	3	6
Family Income Public Welfare								
Yes	(236)	59	18	5	0	6	3	4
No	(653)	50	22	6	1	8	3	6
Don't Know/No Answer	(100)	18	2	11	35	15	0	3

***Chi square significant at .05 level

+Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-responses

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TABLE A-6

MOST IMPORTANT REASON FOR STUDENT ENROLLMENT GIVEN BY PARENTS/GUARDIANS BY MAJOR SUBGROUPS

	BASE*	SLOW LEARNER (%)	FOR TRAINING (%)	JOB PREPARATION (%)	INDIVIDUAL ATTENTION (%)	WAS RECOMMENDED (%)	IMPROVE BEHAVIOR (%)	KEEP HIM IN SCHOOL (%)	PHYSICAL HANDICAP (%)	STUDENT WANTED TO (%)	NO CHOICE (%)	TRANSFERRED (%)	GENERAL (%)
AGGREGATE	(989)	23	11	16	6	5	4	3	2	9	7	1	4
Student Status		***	***	***	***	***	***	***	***	***	***	***	***
Program Completer	(315)	20	8	23	5	6	5	3	2	10	6	2	3
Current Student	(674)	24	12	13	6	5	4	3	2	9	7	1	4
Type of Classroom													
Regular	(239)	9	18	26	4	5	3	2	2	15	6	0	3
Special	(479)	25	8	12	8	4	4	3	2	9	7	2	4
Sheltered Workshop	(207)	34	10	12	3	9	4	3	3	3	8	2	4
Job	(64)	17	8	27	5	6	11	5	2	14	5	0	2
Ethnic Background													
White	(360)	16	13	19	5	5	4	4	3	9	4	1	5
Black	(484)	27	11	15	7	5	3	2	1	10	8	1	3
Spanish Speaking	(97)	28	3	12	8	7	7	4	2	6	9	6	1
State													
Illinois	(194)	6	20	27	4	3	5	3	3	18	5	0	4
Ohio	(199)	14	13	29	5	8	3	4	2	9	7	0	4
North Carolina	(196)	21	12	8	13	4	3	5	1	13	10	0	4
Texas	(200)	11	8	15	5	6	8	4	2	6	3	3	5
New Jersey	(200)	61	3	3	3	6	4	1	3	1	10	5	2
Type of Program		***	***	***	***	***	***	***	***	***	***	***	***
Work Experience Component	(248)	34	8	13	4	7	5	4	2	8	9	2	3
Other	(741)	19	12	18	7	5	4	3	2	10	6	1	4
Family Income Public Welfare													
Yes	(236)	31	9	15	6	5	4	2	2	11	10	1	3
No	(653)	23	12	17	6	6	4	4	2	10	7	1	4
Don't Know/ No Answer	(100)	3	11	13	2	2	5	0	0	4	0	3	2

***Chi square significant at .01 level

*Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-responses

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TABLE A-7

THE TEN MOST FREQUENTLY MENTIONED VOCATIONAL EDUCATION CLASSES TAKEN (TWO MENTIONS)

	BASE*	WOODSHOP/ WOODWORK (%)	GEN'L SHOP (%)	CONSTRUCTION SKILLS (%)	INDUSTRIAL ARTS (%)	HOME EC/ HOMEMAKING (%)	COOKING (%)	SEWING (%)	TYPING (%)	GEN'L PIECE WORK (%)	WORK STUDY/ ORIENTATION (%)
AGGREGATE	(962)	19	7	7	6	7	6	7	6	5	14
Student Status											
Program Completer	(307)	21	8	7	8	7	6	7	11	5	15
Current Student	(655)	19	7	8	6	8	5	8	5	6	14
Type of Classroom											
Regular	(231)	15	14	4	5	9	2	3	7	0	14
Special	(465)	23	6	10	8	9	9	10	7	2	12
Sheltered Workshop	(201)	19	4	6	7	5	7	10	5	18	11
Job	(65)	9	3	3	2	3	0	0	8	0	38
Type of Handicap											
Mental	(880)	19	6	8	6	8	6	8	6	6	13
Physical/Sensory	(82)	22	16	2	9	9	4	1	10	0	23
Sex											
Male	(609)	28	10	12	7	2	1	0	4	6	14
Female	(353)	5	2	0	5	17	16	19	12	3	15
Ethnic Background											
White	(362)	15	10	8	6	6	6	4	6	6	16
Black	(493)	22	5	5	5	10	7	8	5	4	15
Spanish Speaking	(98)	23	4	10	10	3	6	16	13	7	3
Age											
21 and Older	(34)	9	6	12	9	12	3	0	3	3	9
19-20 Years Old	(262)	18	8	10	8	6	3	5	6	3	18
17-18 Years Old	(319)	17	6	6	6	6	4	6	9	5	15
15-16 Years Old	(189)	26	10	6	6	13	7	12	5	5	12
14 and Younger	(79)	30	4	1	5	4	18	19	3	16	8
State											
Illinois	(188)	14	12	3	4	7	2	2	8	0	24
Ohio	(196)	10	8	3	3	5	2	2	5	11	16
North Carolina	(190)	21	8	10	11	12	1	1	3	0	19
Texas	(191)	14	4	21	13	8	11	13	6	3	4
New Jersey	(197)	38	3	1	3	5	15	21	11	10	8
Type of Program											
Work Experience Component	(236)	23	4	13	13	6	10	16	7	9	12
Other	(726)	18	8	6	5	8	5	5	7	4	15

*Small cell size--Interpret with caution

*Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-responses

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TABLE A-8

WHAT THE STUDENTS LIKE MOST ABOUT THE VOCATIONAL EDUCATION PROGRAM

	BASE•	THE TRAINING (%)	JOB PREP-ARATION (%)	FINDS JOBS (%)	OUT-SIDE WORK (%)	HELPS FEEL SUCCESS-FUL (%)	THE TEACHERS (%)	THE PEOPLE (%)	MAKING MONEY (%)	GENERAL POSITIVE (%)	DON'T LIKE IT (%)
AGGREGATE	(962)	54	5	2	1	2	4	5	5	10	5
Student Status		**	**	**	**	**	**	**	**	**	**
Program Completer	(307)	47	8	3	1	3	5	6	4	10	6
Current Student	(655)	58	4	2	1	1	3	4	5	11	5
Type of Classroom											
Regular	(231)	39	10	4	2	3	7	6	5	10	4
Special	(465)	65	3	1	1	1	3	3	1	12	4
Sheltered Workshop	(201)	56	5	1	1	2	4	5	5	8	10
Job	(65)	31	5	9	2	2	2	8	25	8	6
Type of Handicap											
Mental	(880)	56	5	2	1	2	4	5	4	10	5
Physical/Sensory	(82)	38	9	2	2	2	9	5	5	12	5
Sex											
Male	(609)	55	5	2	2	2	3	3	4	10	6
Female	(353)	53	5	2	1	1	5	7	5	10	4
Ethnic Background											
White	(362)	48	5	3	1	2	6	6	5	11	6
Black	(493)	56	6	2	1	2	3	5	4	11	5
Spanish Speaking	(98)	69	4	2	0	2	2	1	5	5	6
Age											
21 and Older	(34)*	32	9	3	0	0	6	9	6	9	9
19-20 Years Old	(262)	39	8	6	2	4	6	8	5	10	5
17-18 Years Old	(319)	55	4	1	1	0	3	4	7	14	6
15-16 Years Old	(189)	70	4	1	1	2	3	3	1	6	4
14 and Younger	(79)	80	1	0	0	1	4	0	3	3	5
State											
Illinois	(188)	40	8	5	2	3	7	3	10	10	4
Ohio	(196)	30	7	4	1	2	4	10	10	13	10
North Carolina	(190)	57	4	1	1	1	3	3	1	17	3
Texas	(191)	63	4	2	2	2	3	5	1	9	3
New Jersey	(197)	81	2	0	1	2	3	2	1	3	5
Type of Program		**	**	**	**	**	**	**	**	**	**
Work Experience Component	(236)	62	6	2	1	3	6	3	3	6	4
Other	(726)	52	5	2	1	1	3	5	5	12	6

*Small cell size--Interpret with caution

**Chi square significant at .05 level

•Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-responses

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TABLE A-9

WHAT STUDENTS LIKE LEAST ABOUT THE VOCATIONAL EDUCATION PROGRAM
(COLLAPSED)

	BASE+	POOR WORKING CONDITIONS (%)	TEACHER/ RELATED CONDITIONS (%)	OTHER STUDENTS (%)	PROGRAM/ RELATED CONDITIONS (%)	GENERAL NEGATIVE (%)	LIKE IT (%)
AGGREGATE	(962)	14	5	3	4	17	44
Student Status							
Program Completer	(307)	12	8	2	5	17	42
Current Student	(655)	15	4	3	4	17	44
Type of Classroom		***	***	***	***	***	***
Regular	(231)	8	4	2	2	21	46
Special	(465)	17	5	2	3	16	45
Sheltered Workshop	(201)	17	8	7	7	14	37
Job	(65)	9	3	2	12	26	45
Type of Handicap							
Mental	(880)	15	5	3	4	17	43
Physical/Sensory	(82)	6	7	2	4	17	46
Sex							
Male	(609)	13	6	3	4	18	45
Female	(353)	17	4	3	4	17	41
Ethnic Background							
White	(362)	13	8	4	4	22	35
Black	(493)	12	3	2	4	14	53
Spanish Speaking	(98)	30	4	4	5	14	31
Age							
21 and Older	(34)*	21	0	3	3	15	32
19-20 Years Old	(262)	11	6	1	3	21	43
17-18 Years Old	(319)	15	5	3	5	17	46
15-16 Years Old	(189)	18	7	4	3	15	37
14 and Younger	(79)	11	3	8	4	11	54
State		***	***	***	***	***	***
Illinois	(188)	5	5	3	5	28	46
Ohio	(196)	13	8	2	5	14	43
North Carolina	(190)	10	3	1	3	13	56
Texas	(191)	27	7	3	3	16	29
New Jersey	(197)	16	5	6	5	16	44
Type of Program							
Work Experience Component	(236)	15	5	6	4	15	41
Other	(726)	14	6	2	4	18	44

*Small cell size--Interpret with caution

***Chi square significant at .01 level

+Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-responses

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TABLE A-10

STUDENT EVALUATION OF VOCATIONAL EDUCATIONAL PROGRAM

	BASE⁺	HELPFUL (%)	NOT TOO HARD (%)	NOT BORING (%)	LIKE PROGRAM WORK (%)
AGGREGATE	(962)	90	92	72	75
Student Status		***			
Program Completer	(307)	85	92	79	79
Current Student	(655)	93	92	77	73
Type of Classroom		***	***	***	***
Regular	(231)	89	89	73	73
Special	(465)	93	93	79	79
Sheltered Workshop	(201)	84	91	72	65
Job	(65)	88	94	71	86
Type of Handicap					**
Mental	(880)	90	91	68	75
Physical/Sensory	(82)	89	94	73	73
Sex					
Male	(609)	90	92	76	75
Female	(353)	90	91	74	74
Ethnic Background					
White	(362)	89	91	68	72
Black	(493)	92	93	81	80
Spanish Speaking	(98)	88	89	72	62
Age					
21 and Older	(34)*	88	91	77	82
19-20 Years Old	(262)	87	92	73	77
17-18 Years Old	(319)	92	93	76	74
15-16 Years Old	(189)	90	91	74	69
14 and Younger	(79)	94	94	85	81
State		***		***	***
Illinois	(188)	92	93	71	79
Ohio	(196)	79	88	69	66
North Carolina	(190)	98	98	84	83
Texas	(191)	92	84	65	68
New Jersey	(197)	90	96	86	80
Type of Program		**			
Work Experience Component	(236)	92	94	79	74
Other	(726)	89	91	74	75

*Small cell size--Interpret with caution
**Chi square significant at .05 level
***Chi square significant at .01 level
⁺Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-responses

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TABLE A-11

STUDENT EVALUATION OF PROGRAM ELEMENTS

	BASE	LIKED TEACHER (%)	LIKED TOOLS AND EQUIPMENT (%)	LIKED PLACE WENT TO SCHOOL (%)	LIKED TREATMENT FROM OTHER STUDENTS (%)
AGGREGATE	(962)	93	87	87	80
Student Status					
Program Completer	(307)	92	86	88	79
Current Student	(655)	93	88	87	81
Type of Classroom			***		***
Regular	(231)	92	84	89	85
Special	(465)	94	91	88	84
Sheltered Workshop	(201)	94	85	85	67
Job	(65)	85	79	88	74
Type of Handicap					
Mental	(880)	93	87	87	80
Physical/Sensory	(82)	94	88	88	85
Sex			***		***
Male	(609)	92	90	87	82
Female	(353)	93	83	87	76
Ethnic Background					
White	(362)	91	84	85	78
Black	(493)	94	89	91	82
Spanish Speaking	(98)	94	91	81	79
Age +					***
21 and Older	(34)*	94	88	85	91
19-20 Years Old	(262)	92	87	89	83
17-18 Years Old	(319)	93	88	88	81
15-16 Years Old	(189)	92	88	83	77
14 and Younger	(79)	91	86	90	65
State			***		***
Illinois	(188)	88	81	85	80
Ohio	(196)	93	81	89	78
North Carolina	(190)	96	94	93	93
Texas	(191)	94	90	84	82
New Jersey	(197)	92	91	86	68
Type of Program		***	***		
Work Experience Component	(236)	96	90	90	79
Other	(726)	92	86	86	80

*Small cell size--Interpret with caution

**Chi square significant at .05 level

***Chi square significant at .01 level

+Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-responses

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TABLE A-12

STUDENT APPRAISAL OF POSSIBLE PROBLEMS IN PROGRAM TRAINING

	BASE+	DID NOT UNDERSTAND TEACHER (%)	FOUND TOOLS TOO HARD TO OPERATE (%)	TEACHER GOT MAD (%)	DID NOT HAVE HELP FROM OTHER STUDENTS (%)
AGGREGATE	(962)	11	12	35	29
Student Status					
Program Completer	(307)	12	15	33	31
Current Student	(655)	10	10	36	27
Type of Classroom			**	**	
Regular	(231)	11	11	31	28
Special	(465)	10	10	34	25
Sheltered Workshop	(201)	15	14	43	37
Job	(65)	6	17	32	28
Type of Handicap					
Mental	(880)	11	11	35	29
Physical/Sensory	(82)	6	15	34	24
Sex					
Male	(609)	10	11	34	30
Female	(353)	12	13	38	27
Ethnic Background					
White	(362)	11	13	35	26
Black	(493)	11	11	31	30
Spanish Speaking	(98)	10	9	55	29
Age					
21 and Older	(34)*	15	9	18	18
19-20 Years Old	(262)	11	10	27	28
17-18 Years Old	(319)	7	10	34	27
15-16 Years Old	(189)	12	13	45	29
14 and Younger	(79)	20	11	51	43
State			***		
Illinois	(188)	9	11	34	30
Ohio	(196)	10	14	30	29
North Carolina	(190)	5	7	20	22
Texas	(191)	11	14	44	17
New Jersey	(197)	18	11	50	44
Type of Program				***	
Work Experience Component	(236)	14	11	45	31
Other	(726)	10	12	32	28

*Small cell size--Interpret with caution

**Chi square significant at .05 level

***Chi square significant at .01 level

+Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-responses

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TABLE A-13

WHAT PARENTS LIKED MOST ABOUT THE VOCATIONAL EDUCATION PROGRAM
(COLLAPSED CATEGORIES)

	BASE*	TRAINING (%)	INDE-PENDENCE (%)	DEVELOP STU-DENT (%)	THE TEACHERS (%)	GENERAL POSITIVE (%)	NEUTRAL (%)	GENERAL NEGATIVE (%)	DON'T KNOW ABOUT PROGRAM (%)	OTHER (%)
AGGREGATE	(989)	41	16	12	2	11	3	3	3	1
Student Status										
Program Completer	(315)	38	20	13	3	11	2	4	3	0
Current Student	(674)	43	14	11	1	12	3	3	2	1
Type of Classroom										
Regular	(239)	35	21	14	1	8	3	3	3	1
Special	(479)	45	14	10	2	14	3	3	2	0
Sheltered Workshop	(207)	45	14	12	3	10	3	4	5	1
Job	(64)	30	22	20	3	11	5	5	2	0
Ethnic Background										
White	(360)	38	13	17	3	9	3	4	2	1
Black	(484)	44	15	8	1	13	3	3	3	1
Spanish Speaking	(97)	52	11	10	3	7	2	4	6	0
Age of Students										
21 and Older	(36)	53	22	17	3	11	0	3	3	0
19-20 Years Old	(271)	31	19	16	2	12	2	4	3	1
17-18 Years Old	(337)	42	15	10	2	13	3	3	3	1
15-16 Years Old	(190)	10	8	1	0	4	3	3	1	7
14 and Younger	(80)	55	6	10	1	10	1	6	3	1
State		***	***	***	***	***	***	***	***	***
Illinois	(194)	37	22	11	2	10	4	3	1	1
Ohio	(199)	28	22	20	1	8	2	3	4	1
North Carolina	(196)	42	16	5	1	21	5	2	3	1
Texas	(200)	36	24	18	1	11	2	2	3	0
New Jersey	(200)	61	6	7	2	8	2	6	4	1
Type of Program		***	***	***	***	***	***	***	***	***
Work Experience Component	(248)	51	12	9	2	15	2	3	4	0
Other	(711)	38	17	13	2	11	3	4	2	1
Family Income Public Welfare										
Yes	(236)	46	12	11	[illegible]	12	2	4	3	0
No	(653)	42	14	11	2	11	3	4	2	1
Don't Know/ No Answer	(100)	28	35	19	1	10	0	0	1	0

***Chi square significant at .01 level
*Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-responses

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TABLE A-14

WHAT PARENTS LIKED LEAST ABOUT THE VOCATIONAL EDUCATION PROGRAM (COLLAPSED CATEGORIES)

	BASE*	CURRICULUM (%)	SHORTAGE (%)	LACK JOB PLACEMENT (%)	STUDENT PLACEMENT (%)	DISCIPLINE (%)	OTHER PROBLEMS (%)	GENERAL NEGATIVE (%)	LIKE IT (%)	OTHER (%)
AGGREGATE	(989)	13	5	3	1	3	5	4	55	1
Student Status		***	***	***	***	***	***	***	***	***
Program Completer	(315)	15	3	3	3	2	4	5	53	1
Current Student	(674)	12	5	3	0	3	5	3	55	1
Type of Classroom										
Regular	(239)	11	3	4	1	0	3	3	62	1
Special	(479)	14	6	3	1	3	4	5	52	1
Sheltered Workshop	(207)	16	4	1	2	4	8	4	49	1
Job	(64)	11	5	9	0	3	8	0	59	0
Ethnic Background										
White	(360)	17	7	4	3	2	6	4	48	1
Black	(484)	9	3	3	0	3	3	3	61	0
Spanish Speaking	(97)	23	2	0	1	3	11	8	42	1
Age of Students										
21 and Older	(36)	14	11	0	8	0	0	3	50	0
19-20 Years Old	(271)	15	3	4	3	2	5	4	51	1
17-18 Years Old	(337)	11	3	2	0	2	5	5	60	1
15-16 Years Old	(190)	12	3	2	1	2	5	4	58	1
14 and Younger	(80)	13	5	0	0	10	9	3	53	0
State										
Illinois	(194)	10	4	3	1	1	4	1	68	1
Ohio	(199)	15	1	0	1	2	7	5	50	1
North Carolina	(196)	3	2	1	1	2	2	2	67	0
Texas	(200)	20	16	5	3	2	4	7	38	3
New Jersey	(200)	18	2	1	2	6	8	6	51	0
Type of Program		***	***	***	***	***	***	***	***	***
Work Experience Component	(248)	12	3	0	2	4	7	4	58	2
Other	(741)	14	5	4	1	2	4	4	53	1
Family Income Public Welfare										
Yes	(236)	11	1	2	0	3	7	5	58	0
No	(653)	12	2	2	1	3	4	4	59	1
Don't Know/ No Answer	(100)	24	28	9	3	0	1	3	22	3

**Chi square significant at .05 level
***Chi square significant at .01 level
+Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-responses

TABLE A-15

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HOW PARENTS RATE THE VOCATIONAL EDUCATION PROGRAM

		PROGRAM RATING			
	BASE*	EXCELLENT (%)	GOOD (%)	FAIR (%)	POOR (%)
AGGREGATE	(989)	26	51	16	4
Student Status					
Program Completer	(315)	29	48	17	4
Current Student	(674)	25	52	16	4
Type of Classroom		***	***	***	***
Regular	(239)	31	45	13	3
Special	(479)	24	55	16	2
Sheltered Workshop	(207)	22	49	18	7
Job	(64)	34	44	17	3
Ethnic Background					
White	(360)	36	42	15	4
Black	(484)	19	59	16	3
Spanish Speaking	(97)	18	50	23	4
Age of Students					
21 and Older	(36)	28	44	17	8
19-20 Years Old	(271)	31	44	17	4
17-18 Years Old	(337)	29	53	12	3
15-16 Years Old	(190)	15	54	22	3
14 and Younger	(80)	8	64	19	8
State***		***	***	***	***
Illinois	(194)	35	44	13	4
Ohio	(199)	28	45	17	4
North Carolina	(196)	12	70	14	0
Texas	(200)	41	40	15	4
New Jersey	(200)	15	56	21	6
Type of Program					
Work experience Component	(248)	25	52	17	4
Other	(741)	27	50	16	4
Family Income Public Welfare		***	***	***	***
Yes	(236)	18	59	17	3
No	(653)	26	49	16	4
Don't Know/No Answer	(100)	47	40	12	0

***Significant at .01 level

*Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-responses

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TABLE A-16

PARENT EVALUATION OF VOCATIONAL EDUCATION PROGRAM

	BASE*	HELPFUL (%)	NOT TOO HARD (%)	NOT BORING (%)	LIKE PROGRAM WORK (%)
AGGREGATE	(989)	89	91	79	76
Student Status					
Program Completer	(315)	88	91	78	76
Current Student	(674)	89	92	80	76
Type of Classroom					
Regular	(239)	86	88	78	75
Special	(479)	91	93	81	77
Sheltered Workshop	(207)	87	92	76	72
Job	(64)	86	91	80	86
Ethnic Background					
White	(360)	88	91	77	71
Black	(484)	90	93	83	82
Spanish Speaking	(97)	85	86	72	68
Age of Students		**			
21 and Younger	(36)	86	89	75	67
19-20	(271)	86	88	78	78
17-18	(337)	91	94	79	77
15-16	(190)	89	90	80	78
14 and Younger	(80)	89	96	89	90
State		***	**		***
Illinois	(194)	88	92	77	77
Ohio	(199)	83	86	76	75
North Carolina	(196)	93	92	80	85
Texas	(200)	92	92	76	62
New Jersey	(200)	87	95	87	82
Type of Program					
Work Experience Component	(248)	89	93	83	75
Other	(741)	88	91	78	76
Family Income Public Welfare					***
Yes	(236)	90	93	84	83
No	(653)	88	91	78	78
Don't Know/ No Answer	(100)	92	91	75	50

**Chi square significant at .05 level
***Chi square significant at .01 level
*Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-responses

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TABLE A-17

PARENT'S EVALUATION OF PROGRAM ELEMENTS

	BASE+	LIKED TEACHER (%)	LIKED TOOLS AND EQUIPMENT (%)	LIKED PLACE CHILD WENT TO SCHOOL (%)	LIKED TREATMENT FROM OTHER STUDENTS (%)
AGGREGATE	(989)	78	67	83	72
Student Status		***			
Program Completer	(315)	80	69	84	73
Current Student	(674)	77	65	83	72
Type of Classroom				***	***
Regular	(239)	75	69	86	76
Special	(479)	80	68	85	74
Sheltered Workshop	(207)	74	62	74	61
Job	(64)	81	61	84	78
Ethnic Background					**
White	(360)	77	68	82	72
Black	(484)	79	68	86	74
Spanish Speaking	(97)	74	61	75	67
Age of Students					***
21 and Older	(36)	78	72	86	86
19-20 Years Old	(271)	79	64	83	72
17-18 Years Old	(337)	77	68	83	75
15-16 Years Old	(190)	74	69	83	71
14 and Younger	(80)	78	59	78	55
State					***
Illinois	(194)	71	66	84	72
Ohio	(199)	80	66	79	76
North Carolina	(196)	81	66	89	75
Texas	(200)	80	73	85	80
New Jersey	(200)	77	63	78	59
Type of Program					
Work Experience Component	(248)	74	65	81	*** 66
Other	(741)	79	67	84	74
Family Income Public Welfare		***	***	***	***
Yes	(236)	78	67	80	66
No	(653)	76	64	82	72
Don't Know/ No Answer	(100)	91	84	96	91

**Chi square significant at .05 level
***Chi Square significant at .01 level
+Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-responses

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TABLE A-18

PARENT APPRAISAL OF POSSIBLE PROBLEMS IN PROGRAM TRAINING

	BASE⁺	DID NOT UNDERSTAND TEACHER	FOUND TOOLS TOO HARD TO OPERATE	TEACHER GOT MAD AT CHILD	CHILD DID NOT HAVE HELP FROM OTHER STUDENTS
		(%)	(%)	(%)	(%)
AGGREGATE	(989)	23	4	13	25
Student Status					
Program Completer	(315)	24	4	12	23
Current Student	(674)	22	4	14	26
Type of Classroom				***	
Regular	(239)	22	3	10	22
Special	(479)	22	5	12	27
Sheltered Workshop	(207)	22	3	15	21
Job	(64)	33	5	22	33
Ethnic Background					
White	(360)	25	5	12	24
Black	(484)	21	3	13	27
Spanish Speaking	(97)	27	3	21	22
Age of Students					
21 and Older	(36)	31	14	11	14
19-20 Years Old	(271)	23	5	12	22
17-18 Years Old	(337)	23	2	13	27
15-16 Years Old	(190)	19	2	14	28
14 and Younger	(80)	24	3	21	23
State			**	***	
Illinois	(194)	23	5	14	22
Ohio	(199)	26	4	12	26
North Carolina	(196)	18	2	6	27
Texas	(200)	26	8	13	28
New Jersey	(200)	20	1	21	22
Type of Program			**		***
Work experience Component	(248)	22	2	13	16
Other	(741)	23	5	13	28
Family Income Public Welfare		***	***		**
Yes	(236)	15	2	14	28
No	(653)	23	4	13	22
Don't Know/No Answer	(100)	36	11	9	36

**Chi square significant at .05 level
***Chi square significant at .01 level
+Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-responses

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TABLE A-19

HOW PARENTS CHARACTERIZED THEIR CHILDS PERSONAL DEVELOPMENT AS A RESULT OF THE TRAINING PROGRAM

		SELF-RELIANCE			SELF-CONFIDENCE			SELF-IMAGE			SOCIAL ABILITY		
	BASE*	MORE	ABOUT SAME	LESS	MORE	ABOUT SAME	LESS	BETTER	ABOUT SAME	WORSE	MORE	ABOUT SAME	LESS
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
AGGREGATE	(989)	68	28	2	69	26	3	64	31	3	67	30	1
Student Status													
Program Completer	(315)	70	26	2	69	26	2	64	32	2	69	28	1
Current Student	(674)	67	29	3	69	26	3	64	31	3	66	31	1
Type of Classroom					**	**	**						
Regular	(239)	64	31	2	64	31	2	63	31	1	64	32	0
Special	(479)	70	27	2	69	27	2	62	33	3	67	29	1
Sheltered Workshop	(207)	67	29	4	76	18	4	70	26	4	69	29	1
Job	(64)	72	25	3	64	30	6	56	39	5	63	34	3
Ethnic Background													
White	(360)	70	26	3	72	24	3	65	31	4	66	31	2
Black	(484)	66	29	2	66	29	2	63	32	1	67	30	1
Spanish Speaking	(97)	70	27	1	66	30	2	59	33	4	69	28	0
Age of Students													
21 and older	(36)	64	28	3	58	31	6	44	47	0	58	36	0
19-20 Years Old	(271)	69	28	1	68	29	1	65	32	2	64	34	1
17-18 Years Old	(337)	67	29	3	70	26	4	65	30	3	70	28	1
15-16 Years Old	(190)	62	33	1	63	31	2	56	36	3	63	33	0
14 and Younger	(80)	73	21	6	70	20	4	74	24	3	73	25	3
State													
Illinois	(194)	66	30	2	65	30	3	65	29	3	65	32	2
Ohio	(199)	65	29	3	67	26	2	63	32	2	63	32	1
North Carolina	(196)	62	35	1	63	33	1	57	40	1	66	32	0
Texas	(200)	76	22	1	75	22	2	64	30	4	69	28	1
New Jersey	(200)	70	25	5	74	21	5	70	26	4	71	27	2
Type of Program		***	***	***	***	***	***	***	***	***			
Work experience Component	(248)	75	22	2	80	17	3	73	21	3	73	25	1
Other	(741)	65	30	2	65	29	2	60	35	2	65	32	1
Family Income Public Welfare													
Yes	(236)	65	29	3	68	26	4	64	31	2	66	31	0
No	(653)	68	29	2	69	26	3	64	30	3	67	30	1
Don't Know/No Answer	(100)	75	23	0	72	26	0	60	38	0	69	28	1

**Chi Square significant at .05 level
***Chi Square significant at .01 level
*Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-responses

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TABLE A-20

STUDENTS WHO HAD SCHOOL JOBS IN BOTH RELATED AND NON-RELATED OCCUPATIONAL AREAS

	BASE+	HAD SCHOOL JOB (%)	BASE+	TYPE OF JOB SELF EMPLOYED/ TECHNICAL (%)	CLERICAL SALES (%)	SERVICE (%)	FARM/ FISHERY/ FORESTRY (%)	PROCESSING (%)	MACHINE TRADES (%)	BENCH WORK (%)	STRUCTURAL WORK (%)	MISC/ OCCUP (%)
AGGREGATE	(962)	31	(293)	3	6	54	1	1	2	4	3	27
Student Status		***										
Program Completer	(307)	38	(117)	3	5	56	2	1	3	2	4	25
Current Student	(655)	27	(176)	3	6	52	0	1	1	5	3	28
Type of Classroom		***										
Regular	(231)	37	(85)	4	11	65	0	0	1	1	0	19
Special	(465)	24	(111)	3	3	67	1	0	2	5	5	16
Sheltered Workshop	(201)	37	(75)	0	3	17	1	3	3	7	5	57
Job	(65)	34	(22)*	9	9	68	0	0	0	0	5	9
Type of Handicap		**										
Mental	(880)	29	(259)	3	5	55	0	1	2	4	4	26
Physical/Sensory	(82)	42	(34)*	3	12	41	3	0	3	0	0	38
Sex												
Male	(609)	30	(181)	2	3	54	1	1	2	3	5	28
Female	(353)	32	(112)	4	9	54	0	1	1	5	1	25
Ethnic Background		**										
White	(362)	36	(130)	2	6	57	1	0	2	4	4	24
Black	(493)	27	(131)	3	5	52	1	1	2	3	4	29
Spanish Speaking	(98)	29	(28)*	0	4	45	0	4	4	7	0	36
Age		***										
21 and Older	(34)*	38	(13)*	0	0	69	0	0	8	0	8	8
19-20 Years Old	(262)	39	(101)	2	7	61	0	1	1	2	4	22
17-18 Years Old	(319)	30	(95)	5	5	38	1	1	3	5	4	37
15-16 Years Old	(189)	14	(26)*	4	0	50	0	0	0	4	0	39
14 and Younger	(78)	10	(15)*	0	7	40	0	0	0	0	0	47
State		***										
Illinois	(188)	32	(61)	7	16	46	0	0	2	0	0	30
Ohio	(196)	46	(91)	2	5	50	2	2	3	3	2	32
North Carolina	(190)	9	(17)*	6	0	59	0	0	0	0	24	12
Texas	(191)	51	(97)	0	2	67	0	0	1	7	4	17
New Jersey	(197)	14	(27)*	4	4	33	0	0	0	4	0	52
Type of Program												
Work Experience Component	(236)	28	(66)	0	2	39	0	0	5	5	5	42
Other	(726)	31	(227)	4	6	58	1	1	1	4	4	23

*Small cell size--Interpret with caution
**Chi square significant at .05 level
***Chi square significant at .01 level
+Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-responses

TABLE A-20a

TYPES OF SERVICE OCCUPATIONS HELD ON SCHOOL JOB

	Base	Percent
AGGREGATE	(155)	54
Domestic Service	(18)	6
Food/Beverage Preparation	(85)	29
Apparel/Furnishings	(18)	6
Building/Related Service	(34)	12

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TABLE A-21

HOW SCHOOL JOBS WERE OBTAINED

	BASE+	THROUGH SCHOOL (%)	THROUGH EDUCATORS (%)	GOT IT MYSELF (%)	RELATIVE/ FRIENDS (%)	REHAB CENTER (%)	JOB CORPS (%)	WANT ADS IN NEWSPAPER (%)	EMPLOYER SOUGHT HELP (%)	MISC (%)
AGGREGATE	(293)	27	47	5	2	2	1	0	1	8
Student Status										
Program Completer	(117)	33	44	5	3	1	0	0	0	4
Current Student	(176)	23	48	5	2	3	2	1	1	10
Type of Classroom										
Regular	(85)	32	49	4	2	1	0	0	0	6
Special	(111)	15	46	8	5	2	3	1	2	14
Sheltered Workshop	(75)	33	44	3	0	4	0	0	0	1
Job	(22)*	41	50	5	0	0	0	0	0	5
Type of Handicap										
Mental	(259)	24	48	6	2	2	1	0	1	9
Physical/Sensory	(34)*	44	41	0	6	0	0	0	0	0
Sex										
Male	(181)	30	47	3	2	2	1	1	1	7
Female	(112)	21	46	8	4	2	2	0	0	9
Ethnic Background										
White	(130)	25	47	5	2	2	2	0	2	7
Black	(131)	25	49	6	2	3	1	0	0	9
Spanish Speaking	(28)*	46	36	0	0	0	0	4	0	4
Age										
21 and Older	(13)*	23	54	0	0	8	0	0	0	8
19-20 Years Old	(101)	30	53	5	1	2	0	1	1	3
17-18 Years Old	(95)	18	51	7	2	3	2	0	0	7
15-16 Years Old	(26)*	42	42	0	0	0	4	0	0	8
14 and Younger	(15)*	47	33	7	0	0	0	0	0	0
State										
Illinois	(61)	34	49	2	3	2	0	0	0	3
Ohio	(91)	30	58	2	0	3	0	0	0	4
North Carolina	(17)*	12	77	6	0	0	6	0	0	0
Texas	(97)	11	37	10	4	2	2	1	2	17
New Jersey	(27)*	63	19	4	4	0	0	0	0	0
Type of Program										
Work Experience Component	(66)	47	38	5	2	0	0	0	0	0
Other	(227)	21	49	3	3	3	1	0	1	10

*Small cell size--Interpret with caution

+Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-responses

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TABLE A-22

WHERE JOB TRAINING WAS RECEIVED FOR SCHOOL JOBS

	BASE•	AT SCHOOL (%)	ON THE JOB (%)	AT HOME FAMILY/REL (%)	NO FORMAL TRAINING (%)	GENERAL (%)
AGGREGATE	(293)	25	52	1	15	4
Student Status						
Program Completer	(117)	28	48	1	18	2
Current Student	(176)	23	54	2	13	5
Type of Classroom						
Regular	(85)	18	55	0	22	2
Special	(111)	28	51	3	14	5
Sheltered Workshop	(75)	32	48	0	7	5
Job	(22)*	14	55	5	23	0
Type of Handicap						
Mental	(259)	24	50	2	16	4
Physical/Sensory	(34)*	29	62	0	6	3
Sex						
Male	(181)	26	47	2	17	4
Female	(112)	23	59	0	12	3
Ethnic Background						
White	(130)	24	50	3	15	5
Black	(131)	21	57	0	16	2
Spanish Speaking	(28)*	50	29	0	14	4
Age						
21 and Older	(13)*	8	69	0	15	0
19-20 Years Old	(101)	24	53	1	19	3
17-18 Years Old	(95)	24	54	0	12	5
15-16 Years Old	(26)*	39	39	4	12	4
14 and Younger	(15)*	40	40	0	13	0
State						
Illinois	(61)	23	56	0	15	3
Ohio	(91)	20	58	0	17	3
North Carolina	(17)*	29	47	0	24	0
Texas	(97)	24	52	4	11	5
New Jersey	(27)*	48	22	0	19	4
Type of Program						
Work Experience Component	(66)	38	39	2	15	2
Other	(227)	21	55	1	15	4

*Small cell size--Interpret with caution

•Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-responses

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TABLE A-23

HOURS WORKED AND HOURLY WAGES RECEIVED AT SCHOOL JOB

		HOURS WORKED PER WEEK AT SCHOOL JOB				HOURLY WAGE RECEIVED AT SCHOOL JOB				
	BASE+	LESS THAN 11 (%)	11-20 (%)	21-35 (%)	MORE THAN 35 (%)	$ .01-$1.59 (%)	$1.60-$1.99 (%)	$2.00-$2.50 (%)	$2.51 & OVER (%)	NOT PAID (%)
AGGREGATE	(293)	50	28	10	8	44	17	9	2	28
Student Status		**								
Program Completer	(117)	49	21	11	14	35	17	13	5	30
Current Student	(176)	51	32	9	5	49	18	6	1	27
Type of Classroom										
Regular	(85)	73	11	7	7	44	24	17	5	12
Special	(111)	40	35	14	7	43	15	5	0	36
Sheltered Workshop	(75)	40	37	7	9	39	13	1	4	43
Job	(22)*	46	27	5	14	64	18	18	0	0
Type of Handicap										
Mental	(259)	47	31	9	8	45	17	7	2	30
Physical/Sensory	(34)*	74	6	12	9	35	21	21	9	15
Sex										
Male	(181)	49	28	10	10	40	21	9	3	27
Female	(112)	51	29	9	5	50	12	7	1	30
Ethnic Background										
White	(130)	43	32	12	9	48	9	9	0	35
Black	(131)	58	22	7	8	43	26	11	5	15
Spanish Speaking	(28)*	46	29	11	7	29	18	0	0	54
Age										
21 and Older	(13)*	15	62	0	8	31	15	0	0	54
19-20 Years Old	(101)	50	23	12	14	38	29	11	4	19
17-18 Years Old	(95)	43	37	12	6	48	13	11	3	25
15-16 Years Old	(26)*	62	27	0	4	39	19	0	0	42
14 and Younger	(15)*	80	0	7	0	27	13	0	0	60
State										
Illinois	(61)	75	13	3	5	51	16	18	5	10
Ohio	(91)	40	37	9	12	52	19	9	4	17
North Carolina	(17)*	59	0	24	6	6	71	12	0	12
Texas	(97)	32	40	13	9	50	5	3	0	42
New Jersey	(27)*	85	4	4	0	4	26	4	0	67
Type of Program		**								
Work Experience Component	(66)	64	12	3	12	21	24	11	5	39
Other	(227)	46	33	10	7	50	15	8	2	25

*Small cell size--Interpret with caution

**Chi square significant at .05 level

+Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-responses

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TABLE 24

OCCUPATIONAL CATAGORIES OF CURRENT JOB

	BASE+	WORK AT A JOB (%)	TYPE JOB AT WORK BASE+	SELF-EMPLYD TECH/NICAL (%)	CLERI-CAL SALES (%)	SER-VICE (%)	FARM-FISHERY-FORESTRY (%)	PRO-CESSING (%)	MACHINE TRADES (%)	BENCH WORK (%)	STRUCTURAL WORK (%)	MISC/OCCUP (%)
AGGREGATE	(962)	33	(313)	3	11	41	7	2	5	8	6	18
Enrollment Status												
Current Enrollee	(599)	64	(120)	1	13	53	8	2	3	3	1	16
Completer in School	(137)	15	(55)	4	6	42	6	0	6	7	2	29
Completer Not in School	(201)	21	(123)	5	13	28	6	2	4	13	14	16
Type of Classroom												
Regular	(231)	47***	(109)	6	14	31	6	2	6	8	6	22
Special	(465)	25	(116)	2	14	35	11	1	7	8	7	16
Sheltered Workshop	(201)	22	(45)*	2	4	58	0	0	0	4	11	20
Job	(65)	66	(43)*	0	5	63	5	5	0	12	2	9
Type of Handicap												
Mental	(880)	30	(264)	3	10	42	7	2	4	9	7	16
Physical/Sensory	(82)	60	(49)*	4	16	37	6	2	6	2	2	25
Sex												
Male	(609)	36***	(217)	2	11	33	10	2	6	7	9	21
Female	(353)	27	(96)	4	13	59	0	1	1	12	0	10
Ethnic Background												
White	(362)	42***	(153)	3	11	40	7	1	4	7	7	22
Black	(493)	26	(127)	4	12	43	7	2	6	9	5	13
Spanish Speaking	(98)	33	(32)*	0	13	41	9	0	0	13	9	16
Age												
21 and Older	(34)*	62***	(21)*	0	5	43	10	0	10	10	5	19
19-20 Years Old	(262)	52	(135)	4	12	32	7	2	5	11	11	16
17-18 Years Old	(319)	30	(97)	3	5	51	6	2	2	6	3	22
15-16 Years Old	(189)	13	(25)*	0	24	48	12	0	0	0	0	16
14 and Younger	(79)	9	(7)*	0	29	29	14	0	0	0	0	29
State												
Illinois	(188)	56***	(106)	5	11	39	7	2	5	9	2	21
Ohio	(196)	40	(79)	1	14	53	0	1	1	6	6	17
North Carolina	(190)	19	(36)*	3	6	36	22	3	14	6	3	8
Texas	(191)	31	(59)	0	9	42	9	0	2	5	3	8
New Jersey	(197)	17	(33)*	6	15	21	6	3	6	15	3	24
Type of Program												
Work Experience Component	(236)	33	(77)	3	9	39	5	1	7	5	14	17
Other	(726)	33	(236)	3	12	42	8	2	4	9	4	18

*Small cell size--Intrepret with caution
***Chi square significant at .01 level
+Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-responses

TABLE A-24a

TYPES OF SERVICE OCCUPATIONS HELD ON CURRENT JOB

	BASE	PERCENT
AGGREGATE	(127)	41
Domestic Services	(19)	6
Food/Beverage Preparation	(55)	18
Miscellaneous Personal Service	(15)	5
Apparel/Furnishings	(12)	4
Building/Related Services	(26)	8

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TABLE A-25

TYPE OF BUSINESS/INDUSTRY OF CURRENT JOBS

	BASE	AGRICULTURE (%)	CONSTRUCTION (%)	MANUFACTURING (%)	TRADE (%)	PRIVATE HOUSEHOLD SERVICE (%)	FINANCE INSURANCE REAL ESTATE (%)	MISC. SERVICE (%)	GOVERNMENT (%)	SELF EMPLOYED (%)
AGGREGATE	(313)	4	5	14	20	2	1	36	14	2
Illinois	(106)	6	0	12	23	1	0	45	9	3
Ohio	(79)	0	1	13	17	1	4	43	19	3
North Carolina	(36)*	19	0	25	17	3	0	25	6	6
Texas	(59)	0	22	7	22	2	0	25	15	0
New Jersey	(33)*	0	3	24	15	3	0	24	27	0

*Small cell size--Interpret with caution

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TABLE A-26

HOW CURRENT JOBS WERE OBTAINED

	BASE⁺	THROUGH SCHOOL (%)	THROUGH EDUCATORS (%)	GOT IT MYSELF (%)	RELATIVES/ FRIENDS (%)	REHAB CENTER (%)	JOB CORPS (%)	WANT ADS IN NEWSPAPER (%)	EMPLOYER SOUGHT HELP (%)	MISC. (%)
AGGREGATE	(313)	13	23	20	25	7	2	2	2	4
Enrollment Status										
Current Enrollee	(120)	14	23	25	21	4	2	2	2	5
Completer in School	(55)	18	33	11	20	4	2	2	2	7
Completer not in School	(123)	11	20	19	29	11	3	3	2	2
Type of Classroom										
Regular	(109)	14	17	21	28	5	1	3	0	6
Special	(116)	12	25	16	26	8	3	2	1	5
Sheltered Workshop	(45)*	4	31	18	24	9	0	4	7	0
Job	(43)*	23	23	28	12	12	0	0	2	0
Type of Handicap										
Mental	(264)	11	23	22	24	8	2	3	2	4
Physical/Sensory	(49)*	22	20	10	31	2	0	0	2	0
Sex										
Male	(217)	10	21	23	30	5	2	2	1	3
Female	(96)	20	27	13	14	15	1	3	2	6
Ethnic Background										
White	(153)	14	20	18	27	6	1	2	3	5
Black	(127)	13	25	24	19	0	2	3	1	4
Spanish Speaking	(32)*	6	34	9	38	9	0	0	0	0
Age										
21 and Older	(21)*	10	33	33	10	10	5	0	0	0
19-20 Years Old	(135)	13	19	21	26	10	2	2	1	4
17-18 Years Old	(97)	16	27	11	28	7	1	2	2	3
15-16 Years Old	(25)*	12	36	32	8	0	0	0	4	8
14 and Younger	(7)*	14	0	67	33	0	0	0	0	0
State										
Illinois	(106)	21	21	15	18	4	1	2	0	4
Ohio	(79)	10	23	29	17	8	1	1	3	8
North Carolina	(36)*	8	19	23	31	8	6	0	3	0
Texas	(59)	9	37	12	24	5	2	0	3	7
New Jersey	(33)*	18	6	25	[illegible]	14	0	3	0	0
Type of Program										
Work Experience Component	(73)	23	26	16	[illegible]	3	0	0	1	1
Other	(236)	10	22	21	[illegible]	[illegible]	2	3	2	3

*Small cell size--Interpret with caution
⁺Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-responses

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TABLE A-27

WHERE TRAINING RECEIVED ON CURRENT JOB

		HOW TRAINED FOR CURRENT JOB				
	BASE•	AT SCHOOL (%)	ON THE JOB (%)	AT HOME FAMILY/ FRIENDS (%)	NO FORMAL TRAINING (%)	GENERAL (%)
AGGREGATE	(313)	13	67	4	15	1
Enrollment Status						
Current Enrollee	(120)	7	65	8	18	3
Completer in School	(55)	9	75	0	16	0
Completer not in School	(123)	20	64	3	12	1
Type of Classroom						
Regular	(109)	7	68	7	17	0
Special	(116)	14	65	4	14	3
Sheltered Workshop	(45)	16	64	0	18	2
Job	(43)	21	70	0	9	0
Type of Handicap						
Mental	(264)	14	64	3	17	2
Physical/Sensory	(49)*	8	80	8	4	0
Sex						
Male	(217)	11	68	4	16	1
Female	(96)	17	64	5	13	2
Ethnic Background						
White	(153)	12	62	7	16	2
Black	(127)	9	73	2	15	1
Spanish Speaking	(32)*	28	59	0	9	0
Age						
21 and Older	(21)*	19	62	5	10	5
19-20 Years Old	(135)	11	74	2	12	1
17-18 Years Old	(97)	14	59	6	19	2
15-16 Years Old	(25)*	0	56	12	28	0
14 and Younger	(7)*	0	71	0	29	0
State						
Illinois	(106)	9	73	7	12	0
Ohio	(79)	14	61	3	22	1
North Carolina	(36)*	0	72	8	11	8
Texas	(59)	32	56	2	9	0
New Jersey	(33)*	3	73	0	24	0
Type of Program						
Work Experience Component	(77)	17	71	0	10	0
Other	(236)	11	65	6	17	2

*Small cell size--Interpret with caution

•Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-responses

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TABLE A-28

HOURS WORKED AND HOURLY WAGES RECEIVED AT CURRENT JOB

	BASE*	HOURS WORKED PER WEEK AT CURRENT JOB				HOURLY WAGE RECEIVED AT CURRENT JOB				
		LESS THAN 11 (%)	11-20 (%)	21-35 (%)	MORE THAN 35- (%)	$ .01-$1.59 (%)	$1.60-$1.99 (%)	$2.00-$2.50 (%)	$2.51 & OVER (%)	NOT PAID (%)
AGGREGATE	(313)	22	17	18	43	25	23	31	14	3
Enrollment Status										
Current Enrollee	(120)	28	29	20	21	38	22	29	3	2
Completer in School	(55)	26	20	26	29	22	24	24	18	11
Completer Not in School	(123)	15	6	13	67	17	20	36	24	1
Type of Classroom										
Regular	(109)	24	17	21	37	22	24	31	17	1
Special	(116)	19	20	13	47	35	18	29	10	4
Sheltered Workshop	(45)*	22	13	22	42	20	36	13	22	7
Job	(43)*	23	12	16	49	14	23	51	9	2
Type of Handicap										
Mental	(264)	21	16	17	45	25	25	30	13	3
Physical/Sensory	(49)*	25	20	20	35	25	16	35	20	2
Sex						**				
Male	(217)	20	19	15	46	25	21	32	17	1
Female	(96)	26	12	24	38	25	28	28	8	7
Ethnic Background										
White	(153)	19	18	22	40	28	22	30	15	3
Black	(127)	25	17	14	43	26	21	32	17	2
Spanish Speaking	(32)*	22	6	9	59	9	41	31	3	9
Age										
21 and Older	(21)*	14	19	14	52	14	24	29	24	10
19-20 Years Old	(135)	18	9	14	59	18	25	32	23	1
17-18 Years Old	(97)	21	26	24	29	29	28	29	5	5
15-16 Years Old	(25)*	52	24	12	8	68	16	16	0	0
14 and Younger	(7)*	29	43	14	14	71	0	29	0	0
State										
Illinois	(106)	26	21	23	29	23	20	36	16	3
Ohio	(79)	19	17	11	53	15	32	34	15	3
North Carolina	(36)*	14	14	19	53	39	17	33	8	0
Texas	(59)	25	10	9	54	20	22	24	17	12
New Jersey	(33)*	15	30	21	33	24	18	39	3	9
Type of Program										
Work Experience Component	(77)	18	16	16	49	21	13	29	23	3
Other	(236)	23	17	18	41	27	23	31	11	3

*Small cell size--Interpret with caution

**Chi square significant at .05 level

*Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-responses

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TABLE A-29

NUMBER OF JOBS HELD SINCE GRADUATION
FROM VOCATIONAL EDUCATION PROGRAM

	BASE+	SAME JOB SINCE GRAD. (%)	CURRENT JOB PLUS ONE OTHER (%)	CURRENT JOB PLUS TWO OTHERS (%)	CURRENTLY UNEMPLOYED PLUS TWO OTHER JOBS SINCE GRAD. (%)	CURRENTLY UNEMPLOYED PLUS ONE OTHER JOB SINCE GRAD. (%)	NO JOBS SINCE GRAD. (%)
AGGREGATE	(321)	40	5	2	9	11	17
Enrollment Status							
Current Enrollee	(120)	0	0	0	0	0	0
Completer in School	(55)	28	3	2	7	12	24
Completer Not in School	(123)	51	7	3	11	11	14
Type of Classroom							
Regular	(102)	50	2	3	11	12	15
Special	(124)	37	6	1	9	13	17
Sheltered Workshop	(74)	27	8	3	7	8	23
Job	(21)*	52	5	5	14	10	14
Type of Handicap							
Mental	(276)	38	5	3	9	12	20
Physical/Sensory	(45)*	51	2	0	13	9	4
Sex							
Male	(196)	44	7	3	11	12	15
Female	(111)	37	2	2	8	12	23
Ethnic Background							
White	(144)	44	5	4	12	9	14
Black	(130)	38	5	2	8	15	22
Spanish Speaking	(29)*	52	10	0	10	3	21
Age							
21 and Older	(23)*	44	0	4	9	4	13
19-20 Years Old	(157)	47	6	3	10	13	14
17-18 Years Old	(85)	29	7	0	6	15	27
15-16 Years Old	(12)*	8	0	0	17	8	42
14 and Younger	(8)*	0	0	0	0	0	13
State							
Illinois	(69)	52	3	4	13	10	7
Ohio	(95)	44	2	2	7	14	20
North Carolina	(22)*	36	5	0	0	18	18
Texas	(64)	36	9	3	16	6	6
New Jersey	(71)	27	7	0	6	11	34
Type of Program							
Work Experience Component	(87)	40	8	2	12	7	10
Other	(234)	40	4	2	9	13	20

*Small cell size -- Interpret with caution
+Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-responses

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TABLE A-30

MOST FREQUENTLY MENTIONED REASONS FOR LEAVING JOBS (COLLAPSED CATEGORIES)

	BASE+	TEMPORARY JOB (%)	RETURNED TO SCHOOL (%)	LAID OFF/ FIRED (%)	WORKING CONDITIONS (%)	OTHER REASONS (%)
AGGREGATE	(441)	27	14	17	19	19
Enrollment Status		**	***	***	***	***
Current Enrollee	(228)	30	18	13	21	15
Completer in School	(63)	27	19	21	13	16
Completer Not in School	(134)	19	5	24	19	31
Type of Classroom						
Regular	(134)	31	13	17	18	19
Special	(183)	26	14	18	18	20
Sheltered Workshop	(79)	27	14	19	20	15
Job	(45)*	22	16	11	27	22
Type of Handicap						
Mental	(396)	27	14	17	19	19
Physical/Sensory	(45)*	27	16	20	16	20
Sex		***	***	***	***	***
Male	(300)	24	15	19	22	17
Female	(141)	34	11	13	13	23
Ethnic Background						
White	(183)	22	14	20	20	22
Black	(215)	32	16	14	17	16
Spanish Speaking	(38)*	24	3	18	24	24
Age						
21 and Older	(18)*	11	33	6	17	28
19-20 Years Old	(171)	24	11	22	20	20
17-18 Years Old	(149)	36	15	11	18	16
15-16 Years Old	(49)*	29	14	16	20	16
14 and Younger	(12)*	17	25	17	33	0
State		***	***	***	***	***
Illinois	(113)	29	12	15	23	18
Ohio	(125)	33	18	16	16	18
North Carolina	(62)	39	19	11	16	13
Texas	(91)	14	10	23	18	26
New Jersey	(50)	16	12	20	24	22
Type of Program ***		***	***	***	***	***
Work Experience Component	(104)	16	10	24	19	25
Other	(337)	30	15	15	19	18

*Small cell size -- Interpret with caution
***Chi square significant at .01 level
+Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-responses

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TABLE A-31

RESPONDENTS NOT LOOKING FOR WORK THE PAST THREE MONTHS AND REASONS FOR NOT LOOKING FOR WORK

				WHY NOT LOOKING FOR WORK											
	BASE+	NOT LOOKING FOR WORK LAST 3 MONTHS (%)	BASE+	IN SCHOOL TRAINING (%)	TOO YOUNG (%)	NOT QUALI-FIED (%)	NEEDED BY FAMILY (%)	NO JOBS AVAIL-ABLE (%)	TOO BUSY (%)	HEALTH/ PREGNANCY (%)	DON'T WANT TO WORK (%)	SIGNED WITH JOB CORPS (%)	SCHOOL WILL FIND JOB (%)	GEN-ERAL/ OTHER (%)	BLANK/ NO ANSWER/ REFUSED (%)
AGGREGATE	(649)	(63)	(407)	53	15	4	2	1	1	2	3	2	1	5	12
Student Status															
Program Completer	(142)	40	(57)	42	5	2	5	5	2	9	5	2	0	12	11
Current Student	(507)	69	(350)	52	17	4	4	2	1	2	2	2	1	4	12
Type of Classroom															
Regular	(122)	44	(54)	39	11	4	4	2	2	4	6	0	2	8	20
Special	(347)	73	(253)	61	10	4	3	1	0	2	1	3	0	5	9
Sheltered Workshop	(156)	62	(96)	30	31	4	1	1	3	1	5	0	1	2	16
Job	(22)*	18	(4)*	25	0	0	0	0	0	25	0	0	0	50	0
Type of Handicap															
Mental	(616)	64	(394)	50	16	4	3	1	1	2	2	2	1	5	12
Physical/Sensory	(33)*	39	(13)*	23											
Sex															
Male	(392)	62	(242)	31	8	0	8	0	8	8	15	0	0	8	2
Female	(257)	64	(165)	53	14	4	2	1	1	0	2	3	0	6	14
Ethnic Background															
White	(209)	63	(132)	48	11	8	3	1	2	4	4	1	0	7	14
Black	(366)	63	(229)	54	17	1	3	1	1	2	2	3	0	5	11
Spanish Speaking	(66)	64	(42)*	41	2	7	2	0	0	2	5	0	5	2	12
Age															
21 and Older	(13)*	69	(9)*	56	0	0	11	0	0	0	0	0	0	0	33
19-20	(127)	44	(56)	55	2	11	4	5	2	7	2	0	2	9	18
17-18	(222)	62	(138)	62	5	4	3	0	2	2	1	4	0	6	9
15-16	(134)	71	(110)	56	17	3	3	1	1	0	3	1	2	7	13
14 and Younger	(72)	69	(50)	14	60	0	0	0	0	2	4	0	[illegible]	4	16
State															
Illinois	(82)	38	(31)	36	16	7	3	3	3	0	13	0	3	10	10
Ohio	(117)	44	(52)	44	6	4	4	0	6	8	0	0	0	6	21
North Carolina	(154)	79	(121)	71	8	0	5	0	1	1	1	5	0	3	3
Texas	(132)	80	(106)	64	8	8	2	2	0	2	1	0	2	4	13
New Jersey	(164)	59	(97)	27	57	4	0	1	0	2	5	1	0	8	
Type of Program															
Work Experience	(159)	64	(102)	34	30	2	2	1	0	3	6	0	2	5	15
Other	(490)	62	(305)	59	10	5	3	1	7	2	1	2	0	6	11

*Small cell size--Interpret with caution
+Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-responses

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TABLE A-32

FUTURE PLANS AND JOB EXPECTATIONS OF STUDENTS AS VIEWED BY STUDENTS AND PARENTS

	BASE+ Students	BASE+ Parents	LIKE TO CONTINUE LINE OF WORK		WANT JOB LIKE TRAINING PROGRAM		EXPECT TO BE DOING ONE YEAR FROM NOW							
							WORKING FULL TIME		IN SCHOOL		WORK & SCHOOL/ PART TIME		OTHER	
			Student (%)	Parent (%)	Student (%)	Parent (%)	Student (%)	Parent (%)	Student (%)	Parent (%)	Student (%)	Parent (%)	Student (%)	Parent (%)
AGGREGATE	(962)	(989)	(67)	(73)	(58)	(54)	(33)	(28)	(35)	(40)	(20)	(17)	(5)	(5)
Enrollment Status			***	***	***	***	***	***	***	***	***	***	***	***
Current Enrollee	(599)	(594)	74	77	61	57	17	14	47	56	25	21	5	3
Completer in School	(137)	(135)	61	64	57	47	37	28	27	33	20	18	5	10
Completer Not in School	(201)	(197)	52	64	49	50	71	66	7	7	6	6	5	6
Type of Classroom			***	***	***									
Regular	(231)	(239)	60	62	52	49	41	37	30	32	18	14	7	4
Special	(465)	[illegible]	75	81	62	59	27	23	38	46	20	16	5	6
Sheltered Workshop	(201)	(207)	62	73	60	54	29	22	39	46	20	22	3	2
Job	(65)	(64)	55	59	46	59	51	52	14	13	25	25	3	2
Type of Handicap														
Mental	(880)	-	68	-	59	-	32	-	35	-	20	-	5	-
Physical/Sensory	(82)	-	59	-	51	-	43	-	29	-	16	-	5	-
Sex														
Male	(609)	-	66	-	56	-	33	-	36	-	19	-	4	-
Female	(353)	-	70	-	62	-	33	-	33	-	20	-	5	-
Ethnic Background														
White	(362)	(360)	61	68	51	55	38	33	27	33	18	17	7	7
Black	(493)	(484)	71	76	62	54	27	22	41	48	21	18	4	3
Spanish Speaking	(98)	(97)	69	74	61	53	40	35	31	41	18	14	0	5
Age						**		***		***		***		***
21 and Older	(34)	36	68	67	62	61	53	58	6	8	27	11	0	14
19-20	(262)	271	56	67	47	45	61	53	16	17	10	14	6	6
17-18	(319)	337	71	79	57	58	27	25	28	34	30	24	4	5
15-16	(189)	190	72	74	63	62	9	3	59	72	25	18	3	1
14 and Younger	(79)	80	75	73	72	49	1	1	82	93	10	5	0	1
State			***	***	***		***		***		***		***	
Illinois	(188)	(194)	56	58	46	44	40	36	22	25	27	23	4	3
Ohio	(196)	(199)	56	61	53	55	46	44	24	[illegible]	18	17	6	6
North Carolina	(190)	(196)	83	88	59	56	21	17	51	55	17	16	4	4
Texas	(191)	(200)	71	85	69	65	40	30	24	34	16	17	8	10
New Jersey	(199)	(200)	70	74	62	50	16	14	53	67	20	14	1	2
Type of Program														
Work Experience Component	(236)	(248)	70	76	62	53	36	29	36	45	19	15	2	7
Other	(726)	(741)	66	72	57	55	32	28	34	39	20	18	5	5
Income				***										
Public Welfare	-	(236)	-	75	-	51		24	-	50	-	14	-	2
Other	-	(653)	-	70	-	57	-	31	-	36	-	18	-	5

**Chi square significant at .05 level
***Chi square significant at .01 level
+Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-responses

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TABLE A-33

EXPECTED EARNINGS IN ONE YEAR

	BASE+	$.01 TO $.99 (%)	$1.00 TO $1.24 (%)	$1.25 TO $1.59 (%)	$1.60 TO $1.99 (%)	$2.00 TO $2.50 (%)	$2.51 TO $2.99 (%)	$3.00 TO $3.50 (%)	$3.51 TO $4.99 (%)	$5.00 AND OVER (%)
AGGREGATE	(502)	5	1	3	4	28	3	11	10	6
Enrollment Status		***	***	***	***	***	***	***	***	***
Current Enrollee	(251)	8	2	4	4	30	2	8	5	2
Completer in School	(79)	5	3	1	5	23	4	14	13	9
Completer not in School	(154)	1	0	2	4	27	3	14	14	10
Type of Classroom										
Regular	(136)	2	2	0	5	18	3	14	15	11
Special	(217)	7	1	4	4	30	1	9	4	4
Sheltered Workshop	(100)	5	1	3	3	35	4	8	11	4
Job	(49)*	4	0	4	4	29	4	18	16	2
Type of Handicap										
Mental	(454)	5	1	3	4	29	2	11	9	4
Physical/Sensory	(48)*	6	0	0	0	15	4	10	15	17
Sex										
Male	(316)	5	1	2	3	25	3	12	11	7
Female	(186)	5	2	4	6	33	2	9	7	3
Ethnic Background										
White	(204)	7	2	1	6	25	2	9	9	7
Black	(235)	3	0	4	3	29	3	12	11	6
Spanish Speaking	(57)	7	2	4	2	33	4	11	7	2
Age										
21 and Older	(27)*	11	0	0	0	22	4	11	0	11
19-20 Years Old	(185)	3	1	1	5	27	3	17	13	8
17-18 Years Old	(179)	6	2	3	3	27	3	8	7	5
15-16 Years Old	(63)	6	3	8	5	33	0	8	2	2
14 and Younger	(11)*	0	0	0	0	55	0	9	0	0
State										
Illinois	(126)	5	2	2	3	14	2	15	19	10
Ohio	(126)	2	0	1	6	36	6	11	8	5
North Carolina	(72)	1	1	4	3	29	3	6	1	1
Texas	(106)	15	2	5	2	22	1	7	10	6
New Jersey	(72)	1	1	4	6	46	1	15	3	4
Type of Program										
Work Experience Component	(128)	2	2	2	3	26	2	10	13	10
Other	(374)	6	1	3	4	29	3	11	8	4

* Small cell size -- Interpret with caution

*** Chi square significant at .01 level

+ Base for subgroups may not total aggregate because of "don't know/no opinion" answers and/or non-responses